GSFC JPSS CMO
April 07, 2016
Released

Effective Date: April 5, 2016
Revision C

Joint Polar Satellite System (JPSS) Ground Project
Code 474
474-00448-01-23

Joint Polar Satellite System (JPSS) Algorithm Specification Volume I: Software Requirement Specification (SRS) for the Ozone Total Column

National Aeronautics and
Space Administration

Goddard Space Flight Center
Greenbelt, Maryland

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Joint Polar Satellite System (JPSS) Algorithm Specification Volume I: Software Requirement Specification (SRS) for the Ozone Total Column JPSS Review/Approval Page

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Preface

This document is under JPSS Ground Project configuration control. Once this document is approved, JPSS approved changes are handled in accordance with Class I and Class II change control requirements as described in the JPSS Configuration Management Procedures, and changes to this document shall be made by complete revision.

Any questions should be addressed to:

JPSS Configuration Management Office
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Change History Log

Revision	Effective Date	Description of Changes (Reference the CCR & CCB/ERB Approve Date)
Rev-	Aug 30, 2013	This version incorporates 474-CCR-13-1185 which was approved by JPSS Ground ERB on the effective date shown.
A	Jan 23, 2014	This version incorporates 474-CCR-13-1434 which was approved by JPSS Ground ERB on the effective date shown.
A1	Oct 23, 2014	This version incorporates 474-CCR-14-2091 which was approved by the JPSS Ground ERB for CO10 on the effective date shown.
B	Jan 07, 2015	This version incorporates 474-CCR-14-1721, 474-CCR-14-1741, 474-CCR-14-1781, 474-CCR-14-2110 and 474-CCR-14-2179 which was approved by JPSS Ground ERB on the effective date shown.
C	Apr 5, 2016	This version incorporates 474-CCR-15-2452, 474-CCR-15-2480, 474-CCR-15-2657, 474-CCR-16-2801 and 474-CCR-16-2851 which was approved by JPSS Ground ERB on the effective date shown.

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List of Waivers

Section / Requirement	Deviation / Waiver #	Date Approved	CCR #	Description	Mission
3.1.1 / SRS.01.23_295	NJO-2016-007	April 5, 2016	474-CCR-16-2851	Waiver for Ozone Total Column (TC) Environmental Data Record (EDR) for JPSS-1 mission and beyond	JPSS-1 JPSS-2
3.1.1 / SRS.01.23_296	NJO-2016-007	April 5, 2016	474-CCR-16-2851	Waiver for Ozone Total Column (TC) Environmental Data Record (EDR) for JPSS-1 mission and beyond	JPSS-1 JPSS-2
3.1.1 / SRS.01.23_297	NJO-2016-007	April 5, 2016	474-CCR-16-2851	Waiver for Ozone Total Column (TC) Environmental Data Record (EDR) for JPSS-1 mission and beyond	JPSS-1 JPSS-2
3.1.1 / SRS.01.23_298	NJO-2016-007	April 5, 2016	474-CCR-16-2851	Waiver for Ozone Total Column (TC) Environmental Data Record (EDR) for JPSS-1 mission and beyond	JPSS-1 JPSS-2
3.1.1 / SRS.01.23_299	NJO-2016-007	April 5, 2016	474-CCR-16-2851	Waiver for Ozone Total Column (TC) Environmental Data Record (EDR) for JPSS-1 mission and beyond	JPSS-1 JPSS-2
3.1.1 / SRS.01.23_300	NJO-2016-007	April 5, 2016	474-CCR-16-2851	Waiver for Ozone Total Column (TC) Environmental Data Record (EDR) for JPSS-1 mission and beyond	JPSS-1 JPSS-2
3.1.1 / SRS.01.23_301	NJO-2016-007	April 5, 2016	474-CCR-16-2851	Waiver for Ozone Total Column (TC) Environmental Data Record (EDR) for JPSS-1 mission and beyond	JPSS-1 JPSS-2
3.1.1 / SRS.01.23_302	NJO-2016-007	April 5, 2016	474-CCR-16-2851	Waiver for Ozone Total Column (TC) Environmental Data Record (EDR) for JPSS-1 mission and beyond	JPSS-1 JPSS-2
3.1.1 / SRS.01.23_303	NJO-2016-007	April 5, 2016	474-CCR-16-2851	Waiver for Ozone Total Column (TC) Environmental Data Record (EDR) for JPSS-1 mission and beyond	JPSS-1 JPSS-2
3.1.2 / SRS.01.23_331	NJO-2016-007	April 5, 2016	474-CCR-16-2851	Waiver for Ozone Total Column (TC) Environmental Data Record (EDR) for JPSS-	JPSS-1 JPSS-2

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Section / Requirement	Deviation / Waiver #	Date Approved	CCR #	Description	Mission
				1 mission and beyond	
3.1.2 / SRS.01.23_332	NJO-2016-007	April 5, 2016	474-CCR-16-2851	Waiver for Ozone Total Column (TC) Environmental Data Record (EDR) for JPSS-1 mission and beyond	JPSS-1 JPSS-2
3.1.2 / SRS.01.23_323	NJO-2016-007	April 5, 2016	474-CCR-16-2851	Waiver for Ozone Total Column (TC) Environmental Data Record (EDR) for JPSS-1 mission and beyond	JPSS-1 JPSS-2
3.1.2 / SRS.01.23_334	NJO-2016-007	April 5, 2016	474-CCR-16-2851	Waiver for Ozone Total Column (TC) Environmental Data Record (EDR) for JPSS-1 mission and beyond	JPSS-1 JPSS-2
3.1.2 / SRS.01.23_325	NJO-2016-007	April 5, 2016	474-CCR-16-2851	Waiver for Ozone Total Column (TC) Environmental Data Record (EDR) for JPSS-1 mission and beyond	JPSS-1 JPSS-2
3.1.2 / SRS.01.23_327	NJO-2016-007	April 5, 2016	474-CCR-16-2851	Waiver for Ozone Total Column (TC) Environmental Data Record (EDR) for JPSS-1 mission and beyond	JPSS-1 JPSS-2
3.1.2 / SRS.01.23_335	NJO-2016-007	April 5, 2016	474-CCR-16-2851	Waiver for Ozone Total Column (TC) Environmental Data Record (EDR) for JPSS-1 mission and beyond	JPSS-1 JPSS-2
3.1.2 / SRS.01.23_329	NJO-2016-007	April 5, 2016	474-CCR-16-2851	Waiver for Ozone Total Column (TC) Environmental Data Record (EDR) for JPSS-1 mission and beyond	JPSS-1 JPSS-2
3.1.2 / SRS.01.23_336	NJO-2016-007	April 5, 2016	474-CCR-16-2851	Waiver for Ozone Total Column (TC) Environmental Data Record (EDR) for JPSS-1 mission and beyond	JPSS-1 JPSS-2
3.2.2 / SRS.01.23_281	NJO-2016-007	April 5, 2016	474-CCR-16-2851	Waiver for Ozone Total Column (TC) Environmental Data Record (EDR) for JPSS-1 mission and beyond	JPSS-1 JPSS-2
3.2.2 / SRS.01.23_282	NJO-2016-007	April 5, 2016	474-CCR-16-2851	Waiver for Ozone Total Column (TC) Environmental Data Record (EDR) for JPSS-1 mission and beyond	JPSS-1 JPSS-2

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Section / Requirement	Deviation / Waiver #	Date Approved	CCR #	Description	Mission
3.2.2 / SRS.01.23_283	NJO-2016-007	April 5, 2016	474-CCR-16-2851	Waiver for Ozone Total Column (TC) Environmental Data Record (EDR) for JPSS-1 mission and beyond	JPSS-1 JPSS-2
3.2.2 / SRS.01.23_284	NJO-2016-007	April 5, 2016	474-CCR-16-2851	Waiver for Ozone Total Column (TC) Environmental Data Record (EDR) for JPSS-1 mission and beyond	JPSS-1 JPSS-2
3.2.2 / SRS.01.23_285	NJO-2016-007	April 5, 2016	474-CCR-16-2851	Waiver for Ozone Total Column (TC) Environmental Data Record (EDR) for JPSS-1 mission and beyond	JPSS-1 JPSS-2
3.2.2 / SRS.01.23_286	NJO-2016-007	April 5, 2016	474-CCR-16-2851	Waiver for Ozone Total Column (TC) Environmental Data Record (EDR) for JPSS-1 mission and beyond	JPSS-1 JPSS-2
3.2.2 / SRS.01.23_287	NJO-2016-007	April 5, 2016	474-CCR-16-2851	Waiver for Ozone Total Column (TC) Environmental Data Record (EDR) for JPSS-1 mission and beyond	JPSS-1 JPSS-2
3.2.2 / SRS.01.23_288	NJO-2016-007	April 5, 2016	474-CCR-16-2851	Waiver for Ozone Total Column (TC) Environmental Data Record (EDR) for JPSS-1 mission and beyond	JPSS-1 JPSS-2
3.2.2 / SRS.01.23_289	NJO-2016-007	April 5, 2016	474-CCR-16-2851	Waiver for Ozone Total Column (TC) Environmental Data Record (EDR) for JPSS-1 mission and beyond	JPSS-1 JPSS-2
3.2.2 / SRS.01.23_290	NJO-2016-007	April 5, 2016	474-CCR-16-2851	Waiver for Ozone Total Column (TC) Environmental Data Record (EDR) for JPSS-1 mission and beyond	JPSS-1 JPSS-2
3.2.2 / SRS.01.23_305	NJO-2016-007	April 5, 2016	474-CCR-16-2851	Waiver for Ozone Total Column (TC) Environmental Data Record (EDR) for JPSS-1 mission and beyond	JPSS-1 JPSS-2
3.2.2 / SRS.01.23_306	NJO-2016-007	April 5, 2016	474-CCR-16-2851	Waiver for Ozone Total Column (TC) Environmental Data Record (EDR) for JPSS-1 mission and beyond	JPSS-1 JPSS-2
3.2.2 /	NJO-	April 5,	474-CCR-	Waiver for Ozone Total	JPSS-1

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Section / Requirement	Deviation / Waiver #	Date Approved	CCR #	Description	Mission
SRS.01.23_307	2016-007	2016	16-2851	Column (TC) Environmental Data Record (EDR) for JPSS-1 mission and beyond	JPSS-2
3.2.2 / SRS.01.23_308	NJO-2016-007	April 5, 2016	474-CCR-16-2851	Waiver for Ozone Total Column (TC) Environmental Data Record (EDR) for JPSS-1 mission and beyond	JPSS-1 JPSS-2
3.2.2 / SRS.01.23_309	NJO-2016-007	April 5, 2016	474-CCR-16-2851	Waiver for Ozone Total Column (TC) Environmental Data Record (EDR) for JPSS-1 mission and beyond	JPSS-1 JPSS-2
3.2.2 / SRS.01.23_310	NJO-2016-007	April 5, 2016	474-CCR-16-2851	Waiver for Ozone Total Column (TC) Environmental Data Record (EDR) for JPSS-1 mission and beyond	JPSS-1 JPSS-2
3.2.2 / SRS.01.23_311	NJO-2016-007	April 5, 2016	474-CCR-16-2851	Waiver for Ozone Total Column (TC) Environmental Data Record (EDR) for JPSS-1 mission and beyond	JPSS-1 JPSS-2
3.2.2 / SRS.01.23_312	NJO-2016-007	April 5, 2016	474-CCR-16-2851	Waiver for Ozone Total Column (TC) Environmental Data Record (EDR) for JPSS-1 mission and beyond	JPSS-1 JPSS-2
3.2.2 / SRS.01.23_313	NJO-2016-007	April 5, 2016	474-CCR-16-2851	Waiver for Ozone Total Column (TC) Environmental Data Record (EDR) for JPSS-1 mission and beyond	JPSS-1 JPSS-2
3.2.2 / SRS.01.23_314	NJO-2016-007	April 5, 2016	474-CCR-16-2851	Waiver for Ozone Total Column (TC) Environmental Data Record (EDR) for JPSS-1 mission and beyond	JPSS-1 JPSS-2
3.2.3 / SRS.01.23_291	NJO-2016-007	April 5, 2016	474-CCR-16-2851	Waiver for Ozone Total Column (TC) Environmental Data Record (EDR) for JPSS-1 mission and beyond	JPSS-1 JPSS-2
3.2.3 / SRS.01.23_316	NJO-2016-007	April 5, 2016	474-CCR-16-2851	Waiver for Ozone Total Column (TC) Environmental Data Record (EDR) for JPSS-1 mission and beyond	JPSS-1 JPSS-2
3.3.1 / SRS.01.23_333	NJO-2016-	April 5, 2016	474-CCR-16-2851	Waiver for Ozone Total Column (TC) Environmental	JPSS-1 JPSS-2

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Section / Requirement	Deviation / Waiver #	Date Approved	CCR #	Description	Mission
	007			Data Record (EDR) for JPSS-1 mission and beyond	
3.3.1 / SRS.01.23_337	NJO-2016-007	April 5, 2016	474-CCR-16-2851	Waiver for Ozone Total Column (TC) Environmental Data Record (EDR) for JPSS-1 mission and beyond	JPSS-1 JPSS-2
3.3.1 / SRS.01.23_339	NJO-2016-007	April 5, 2016	474-CCR-16-2851	Waiver for Ozone Total Column (TC) Environmental Data Record (EDR) for JPSS-1 mission and beyond	JPSS-1 JPSS-2
3.3.2 / SRS.01.23_292	NJO-2016-007	April 5, 2016	474-CCR-16-2851	Waiver for Ozone Total Column (TC) Environmental Data Record (EDR) for JPSS-1 mission and beyond	JPSS-1 JPSS-2
3.3.2 / SRS.01.23_317	NJO-2016-007	April 5, 2016	474-CCR-16-2851	Waiver for Ozone Total Column (TC) Environmental Data Record (EDR) for JPSS-1 mission and beyond	JPSS-1 JPSS-2
3.3.2 / SRS.01.23_293	NJO-2016-007	April 5, 2016	474-CCR-16-2851	Waiver for Ozone Total Column (TC) Environmental Data Record (EDR) for JPSS-1 mission and beyond	JPSS-1 JPSS-2
3.3.2 / SRS.01.23_318	NJO-2016-007	April 5, 2016	474-CCR-16-2851	Waiver for Ozone Total Column (TC) Environmental Data Record (EDR) for JPSS-1 mission and beyond	JPSS-1 JPSS-2
3.6 / SRS.01.23_304	NJO-2016-007	April 5, 2016	474-CCR-16-2851	Waiver for Ozone Total Column (TC) Environmental Data Record (EDR) for JPSS-1 mission and beyond	JPSS-1 JPSS-2
3.6 / SRS.01.23_319	NJO-2016-007	April 5, 2016	474-CCR-16-2851	Waiver for Ozone Total Column (TC) Environmental Data Record (EDR) for JPSS-1 mission and beyond	JPSS-1 JPSS-2
3.7 / SRS.01.23_294	NJO-2016-007	April 5, 2016	474-CCR-16-2851	Waiver for Ozone Total Column (TC) Environmental Data Record (EDR) for JPSS-1 mission and beyond	JPSS-1 JPSS-2
3.12 / SRS.01.23_280	NJO-2016-007	April 5, 2016	474-CCR-16-2851	Waiver for Ozone Total Column (TC) Environmental Data Record (EDR) for JPSS-	JPSS-1 JPSS-2

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Section / Requirement	Deviation / Waiver #	Date Approved	CCR #	Description	Mission
				1 mission and beyond	
3.12 / SRS.01.23_320	NJO-2016-007	April 5, 2016	474-CCR-16-2851	Waiver for Ozone Total Column (TC) Environmental Data Record (EDR) for JPSS-1 mission and beyond	JPSS-1 JPSS-2

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List of TBx Items

TBx	Type	ID	Text	Action
None				

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1 Introduction

The Joint Polar Satellite System (JPSS) is the National Oceanic and Atmospheric Administration's (NOAA) next-generation operational Earth observation program that acquires and distributes global environmental data primarily from multiple polar-orbiting satellites. The program plays a critical role in NOAA's mission to understand and predict changes in weather, climate, oceans and coasts, and the space environment, which support the Nation's economy and protect lives and property. The first JPSS satellite mission, the Suomi National Polar-orbiting Partnership (S-NPP) satellite, successfully launched in October 2011. S-NPP, along with the legacy NOAA Polar Operational Environmental Satellites (POES), provides continuous environmental observations. Two JPSS satellites will follow S-NPP: JPSS-1, planned for launch in fiscal year (FY) 2017, with JPSS-2 to follow in FY2022.

In addition to the JPSS Program's own satellites operating in the 1330 (±10) Local Time of the Ascending Node (LTAN) orbit, NOAA also leverages mission partner assets for complete global coverage. These partner assets include the Department of Defense (DoD) Defense Meteorological Satellite Program (DMSP) operational weather satellites (in the 1730 - 1930 LTAN orbit), the European Organisation for the Exploitation of Meteorological Satellites (EUMETSAT) Meteorological Operational (Metop) satellites (in the 2130 LTAN orbit) and the Japanese Aerospace Exploration Agency (JAXA) Global Change Observation Mission-Water (GCOM-W) satellite (in the 1330 LTAN orbit). JPSS routes Metop data from McMurdo Station, Antarctica to the EUMETSAT facility in Darmstadt, Germany and EUMETSAT, in turn, provides Metop data to NOAA. For GCOM, JPSS routes the GCOM-W data from Svalbard, Norway through the NOAA Satellite Operations Facility (NSOF) in Suitland, MD, processes GCOM-W data and delivers GCOM-W products to the JPSS users who have JAXA permissions.

Additionally, the JPSS Program provides data acquisition and routing support to the DMSP and the WindSat Coriolis Program. JPSS routes DMSP data from McMurdo Station to the 557th Weather Wing at Offutt Air Force Base in Omaha, NE. After processing, the 557th releases the DMSP data for public consumption over the Internet via the National Geophysical Data Center in Boulder, CO. The JPSS Program provides data routing support to the National Science Foundation (NSF), as well as the National Aeronautics and Space Administration (NASA) Space Communications and Navigation (SCaN)-supported missions, which include the Earth Observing System (EOS). As part of the agreements for the use of McMurdo Station, JPSS provides communications/network services for the NSF between McMurdo Station, Antarctica and Centennial, Colorado.

As a multi-mission ground infrastructure, the JPSS Ground System supports the heterogeneous constellation of the before-mentioned polar-orbiting satellites both within and outside the JPSS Program through a comprehensive set of services as listed in Table 1-1.

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Table: 1-1 JPSS Ground System Services

Service	Description
Enterprise Management and Ground Operations	Provides mission management, mission operations, ground operations, contingency management and system sustainment
Flight Operations	Provides launch support and early orbit operations, telemetry and commanding, orbital operations, mission data playback, payload support, flight software upgrade, flight vehicle simulation, and disposal at the end of mission life
Data Acquisition	Provides space/ground communications for acquiring mission data
Data Routing	Provides routing of telemetry, mission and/or operations data through JPSS' global data network
Data Product Generation	Provides the processing of mission data to generate and distribute raw, sensor, environmental, and ancillary data products
Data Product Calibration and Validation	Provides calibration and validation of the data products
Field Terminal Support	Provides development and operational support to the Field Terminal customers

1.1 Identification

This SRS provides requirements for the nadir total-column ozone retrieval EDR.

1.2 Algorithm Overview

The algorithm calculates total column ozone abundances at nadir from the ozone nadir total column SDR radiances.

1.3 Document Overview

Section	Description
Section 1	Introduction - Provides a brief overview of the JPSS Ground System and the relevant algorithm, as reference material only.
Section 2	Related Documentation - Lists related documents and identifies them as Parent, Applicable, or Information Documents such as, MOAs, MOUs, technical implementation agreements, as well as Data Format specifications. This section also establishes an order of precedence in the event of conflict between two or more documents.
Section 3	Algorithm Requirements - Provides a summary of the science requirements for the products covered by this volume.
Appendix A	Requirements Attributes - Provides the mapping of requirements to verification methodology and attributes.

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2 Related Documentation

The latest JPSS documents can be obtained from URL: https://jpssmis.gsfc.nasa.gov/frontmenu_dsp.cfm. JPSS Project documents have a document number starting with 470, 472 or 474 indicating the governing Configuration Control Board (CCB) (Program, Flight, or Ground) that has the control authority of the document.

2.1 Parent Documents

The following reference document(s) is (are) the Parent Document(s) from which this document has been derived. Any modification to a Parent Document will be reviewed to identify the impact upon this document. In the event of a conflict between a Parent Document and the content of this document, the JPSS Program Configuration Change Board has the final authority for conflict resolution.

Doc. No.	Document Title
470-00067	Joint Polar Satellite System (JPSS) Ground System Requirements Document (GSRD)
470-00067-02	Joint Polar Satellite System (JPSS) Ground System Requirements Document (GSRD), Volume 2 - Science Product Specification
474-00448-01-01	Joint Polar Satellite System (JPSS) Algorithm Specification Volume I: Software Requirements Specification (SRS) for the Common Algorithms

2.2 Applicable Documents

The following document(s) is (are) the Applicable Document(s) from which this document has been derived. Any modification to an Applicable Document will be reviewed to identify the impact upon this document. In the event of conflict between an Applicable Document and the content of this document, the JPSS Program Configuration Change Board has the final authority for conflict resolution.

Doc. No.	Document Title
D0001-M01-S01-006	Joint Polar Satellite System (JPSS) OMPS NADIR Total Column Ozone Algorithm Theoretical Basis Document (ATBD)
474-00448-02-23	Joint Polar Satellite System (JPSS) Algorithm Specification Volume II: Data Dictionary for the Ozone Total Column EDR
474-00448-04-23	Joint Polar Satellite System (JPSS) Algorithm Specification Volume IV: Software Requirements Specification Parameter File (SRSPF) for the Ozone Total Column EDR

2.3 Information Documents

The following documents are referenced herein and amplify or clarify the information presented in this document. These documents are not binding on the content of this document.

Doc. No.	Document Title
474-00333	Joint Polar Satellite System (JPSS) Ground System (GS) Architecture Description Document (ADD)
474-00054	Joint Polar Satellite System (JPSS) Ground System (GS) Concept of Operations (ConOps)

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Doc. No.	Document Title
470-00041	Joint Polar Satellite System (JPSS) Program Lexicon
474-00448-03-23	Joint Polar Satellite System (JPSS) Algorithm Specification Volume III: Operational Algorithm Description (OAD) for the Ozone Total Column EDR
429-05-02-42	Joint Polar Satellite System (JPSS) Mission Data Format Control Book for NPP
472-00251	Joint Polar Satellite System (JPSS) Mission Data Format Control Book for JPSS-1

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3 Algorithm Requirements

3.1 States and Modes

3.1.1 Normal Mode Performance

SRS.01.23_295 The Ozone Total Column EDR algorithm shall calculate the ozone total column with a measurement precision of 6.0 Dobson units for columns between 50 and 250 Dobson units.

Waiver **474-CCR-16-2851**: Suppress IDPS B2.0 production of Ozone TC EDR using JPSS-1 OMPS data starting with JPSS L3AT/GPAT/GSAT (LG2) acceptance testing and continue the suppression indefinitely. Waive all requirements in JPSS Algorithm Specification Volume I: SRS for the Ozone TC (474-00448-01-23) for JPSS-1 mission and beyond. IDPS B2.0 production of all OMPS TC AP, RDR, SDR, and Ozone TC EDR from S-NPP mission is not affected by this waiver. IDPS B2.0 production of OMPS TC AP, RDR, and SDR from JPSS-1 mission is not affected by this waiver. Relieve the production and performance of Ozone TC EDR from JPSS-1 mission from Block 2 IDPS.

Rationale: The measurement precision value was flowed down from the Level 1 and Level 2 documents. The performance threshold is maintained at the product maturity level achieved as of October 6, 2014 for the S-NPP mission.

Mission Effectivity: S-NPP

SRS.01.23_296 The Ozone Total Column EDR algorithm shall calculate the ozone total column with a measurement precision of 7.7 Dobson units for columns between 250 and 450 Dobson units.

Waiver **474-CCR-16-2851**: Suppress IDPS B2.0 production of Ozone TC EDR using JPSS-1 OMPS data starting with JPSS L3AT/GPAT/GSAT (LG2) acceptance testing and continue the suppression indefinitely. Waive all requirements in JPSS Algorithm Specification Volume I: SRS for the Ozone TC (474-00448-01-23) for JPSS-1 mission and beyond. IDPS B2.0 production of all OMPS TC AP, RDR, SDR, and Ozone TC EDR from S-NPP mission is not affected by this waiver. IDPS B2.0 production of OMPS TC AP, RDR, and SDR from JPSS-1 mission is not affected by this waiver. Relieve the production and performance of Ozone TC EDR from JPSS-1 mission from Block 2 IDPS.

Rationale: The measurement precision value was flowed down from the Level 1 and Level 2 documents. The performance threshold is maintained at the product maturity level achieved as of October 6, 2014 for the S-NPP mission.

Mission Effectivity: S-NPP

SRS.01.23_297 The Ozone Total Column EDR algorithm shall calculate the ozone total column with a measurement precision of 2.8 Dobson units + 1.1% of the measured Ozone amount in a vertical column for columns ranging from 450 to 650 Dobson units.

Check the JPSS MIS Server at https://jpssmis.gsfc.nasa.gov/frontmenu_dsp.cfm to verify that this is the correct version prior to use.

Waiver **474-CCR-16-2851**: Suppress IDPS B2.0 production of Ozone TC EDR using JPSS-1 OMPS data starting with JPSS L3AT/GPAT/GSAT (LG2) acceptance testing and continue the suppression indefinitely. Waive all requirements in JPSS Algorithm Specification Volume I: SRS for the Ozone TC (474-00448-01-23) for JPSS-1 mission and beyond. IDPS B2.0 production of all OMPS TC AP, RDR, SDR, and Ozone TC EDR from S-NPP mission is not affected by this waiver. IDPS B2.0 production of OMPS TC AP, RDR, and SDR from JPSS-1 mission is not affected by this waiver. Relieve the production and performance of Ozone TC EDR from JPSS-1 mission from Block 2 IDPS.

Rationale: The measurement precision value in this range was flowed down from the Level 1 and Level 2 documents. The precision value can vary from 7.8 at the measured Ozone amount of 450 Dobson units to 10 at the measured Ozone amount of 650 Dobson units. The performance threshold is maintained at the product maturity level achieved as of October 6, 2014 for the S-NPP mission.

Mission Effectivity: S-NPP

SRS.01.23_298 The Ozone Total Column EDR algorithm shall calculate the ozone total column with a measurement accuracy of 9.5 Dobson units for columns between 50 and 250 Dobson units.

Waiver **474-CCR-16-2851**: Suppress IDPS B2.0 production of Ozone TC EDR using JPSS-1 OMPS data starting with JPSS L3AT/GPAT/GSAT (LG2) acceptance testing and continue the suppression indefinitely. Waive all requirements in JPSS Algorithm Specification Volume I: SRS for the Ozone TC (474-00448-01-23) for JPSS-1 mission and beyond. IDPS B2.0 production of all OMPS TC AP, RDR, SDR, and Ozone TC EDR from S-NPP mission is not affected by this waiver. IDPS B2.0 production of OMPS TC AP, RDR, and SDR from JPSS-1 mission is not affected by this waiver. Relieve the production and performance of Ozone TC EDR from JPSS-1 mission from Block 2 IDPS.

Rationale: The measurement accuracy value was flowed down from the Level 1 and Level 2 documents. The performance threshold is maintained at the product maturity level achieved as of October 6, 2014 for the S-NPP mission.

Mission Effectivity: S-NPP

SRS.01.23_299 The Ozone Total Column EDR algorithm shall calculate the ozone total column with a measurement accuracy of 13 Dobson units for columns between 250 and 450 Dobson units.

Waiver **474-CCR-16-2851**: Suppress IDPS B2.0 production of Ozone TC EDR using JPSS-1 OMPS data starting with JPSS L3AT/GPAT/GSAT (LG2) acceptance testing and continue the suppression indefinitely. Waive all requirements in JPSS Algorithm Specification Volume I: SRS for the Ozone TC (474-00448-01-23) for JPSS-1 mission and beyond. IDPS B2.0 production of all OMPS TC AP, RDR, SDR, and Ozone TC EDR from S-NPP mission is not affected by this waiver. IDPS B2.0 production of OMPS TC AP, RDR, and SDR from JPSS-1 mission is not affected by this waiver. Relieve the production and performance of Ozone TC EDR from JPSS-1 mission from Block 2 IDPS.

Check the JPSS MIS Server at https://jpssmis.gsfc.nasa.gov/frontmenu_dsp.cfm to verify that this is the correct version prior to use.

Rationale: The measurement accuracy value was flowed down from the Level 1 and Level 2 documents. The performance threshold is maintained at the product maturity level achieved as of October 6, 2014 for the S-NPP mission.

Mission Effectivity: S-NPP

SRS.01.23_300 The Ozone Total Column EDR algorithm shall calculate the ozone total column with a measurement accuracy of 16 Dobson units for columns between 450 and 650 Dobson units.

Waiver **474-CCR-16-2851**: Suppress IDPS B2.0 production of Ozone TC EDR using JPSS-1 OMPS data starting with JPSS L3AT/GPAT/GSAT (LG2) acceptance testing and continue the suppression indefinitely. Waive all requirements in JPSS Algorithm Specification Volume I: SRS for the Ozone TC (474-00448-01-23) for JPSS-1 mission and beyond. IDPS B2.0 production of all OMPS TC AP, RDR, SDR, and Ozone TC EDR from S-NPP mission is not affected by this waiver. IDPS B2.0 production of OMPS TC AP, RDR, and SDR from JPSS-1 mission is not affected by this waiver. Relieve the production and performance of Ozone TC EDR from JPSS-1 mission from Block 2 IDPS.

Rationale: The measurement accuracy value was flowed down from the Level 1 and Level 2 documents. The performance threshold is maintained at the product maturity level achieved as of October 6, 2014 for the S-NPP mission.

Mission Effectivity: S-NPP

SRS.01.23_301 The Ozone Total Column EDR algorithm shall calculate the ozone total column from 0 to 60 km.

Waiver **474-CCR-16-2851**: Suppress IDPS B2.0 production of Ozone TC EDR using JPSS-1 OMPS data starting with JPSS L3AT/GPAT/GSAT (LG2) acceptance testing and continue the suppression indefinitely. Waive all requirements in JPSS Algorithm Specification Volume I: SRS for the Ozone TC (474-00448-01-23) for JPSS-1 mission and beyond. IDPS B2.0 production of all OMPS TC AP, RDR, SDR, and Ozone TC EDR from S-NPP mission is not affected by this waiver. IDPS B2.0 production of OMPS TC AP, RDR, and SDR from JPSS-1 mission is not affected by this waiver. Relieve the production and performance of Ozone TC EDR from JPSS-1 mission from Block 2 IDPS.

Rationale: The vertical column size for the Ozone Total Column EDR was flowed down from the Level 1 and Level 2 documents. The performance threshold is maintained at the product maturity level achieved as of October 6, 2014 for the S-NPP mission.

Mission Effectivity: S-NPP

SRS.01.23_302 The Ozone Total Column EDR algorithm shall have a refresh of at least 90% coverage of the globe every 24 hours, averaged monthly.

Waiver **474-CCR-16-2851**: Suppress IDPS B2.0 production of Ozone TC EDR using JPSS-1 OMPS data starting with JPSS L3AT/GPAT/GSAT (LG2) acceptance testing and continue the suppression indefinitely. Waive all requirements in JPSS Algorithm Specification Volume I: SRS for the Ozone TC (474-00448-01-23) for JPSS-1 mission and beyond. IDPS B2.0 production of all OMPS TC AP, RDR, SDR, and Ozone TC EDR from S-NPP mission is not

affected by this waiver. IDPS B2.0 production of OMPS TC AP, RDR, and SDR from JPSS-1 mission is not affected by this waiver. Relieve the production and performance of Ozone TC EDR from JPSS-1 mission from Block 2 IDPS.

Rationale: Refresh is a function primarily of SDR. Refresh is a function primarily of SDR. The algorithm will process all available SDR input data only within the constraints of available refresh and coverage rates to produce the product. The performance threshold is maintained at the product maturity level achieved as of October 6, 2014 for the S-NPP mission.

Mission Effectivity: S-NPP

SRS.01.23_303 The Ozone Total Column EDR algorithm shall have a horizontal cell size at nadir of 50 x 50 square kilometers or smaller.

Waiver **474-CCR-16-2851**: Suppress IDPS B2.0 production of Ozone TC EDR using JPSS-1 OMPS data starting with JPSS L3AT/GPAT/GSAT (LG2) acceptance testing and continue the suppression indefinitely. Waive all requirements in JPSS Algorithm Specification Volume I: SRS for the Ozone TC (474-00448-01-23) for JPSS-1 mission and beyond. IDPS B2.0 production of all OMPS TC AP, RDR, SDR, and Ozone TC EDR from S-NPP mission is not affected by this waiver. IDPS B2.0 production of OMPS TC AP, RDR, and SDR from JPSS-1 mission is not affected by this waiver. Relieve the production and performance of Ozone TC EDR from JPSS-1 mission from Block 2 IDPS.

Rationale: The horizontal cell size for nadir was flowed down from the Level 1 and Level 2 documents. The performance threshold is maintained at the product maturity level achieved as of October 6, 2014 for the S-NPP mission.

Mission Effectivity: S-NPP

3.1.2 Graceful Degradation Mode Performance

SRS.01.23_331 The Ozone Total Column First Guess IP software shall use NCEP Surface Pressure extended forecast data for fallback processing when the relevant NCEP current forecast input is not available.

Waiver **474-CCR-16-2851**: Suppress IDPS B2.0 production of Ozone TC EDR using JPSS-1 OMPS data starting with JPSS L3AT/GPAT/GSAT (LG2) acceptance testing and continue the suppression indefinitely. Waive all requirements in JPSS Algorithm Specification Volume I: SRS for the Ozone TC (474-00448-01-23) for JPSS-1 mission and beyond. IDPS B2.0 production of all OMPS TC AP, RDR, SDR, and Ozone TC EDR from S-NPP mission is not affected by this waiver. IDPS B2.0 production of OMPS TC AP, RDR, and SDR from JPSS-1 mission is not affected by this waiver. Relieve the production and performance of Ozone TC EDR from JPSS-1 mission from Block 2 IDPS.

Rationale: The IP software through its algorithm must generate products using back up data sources to meet the graceful degradation requirement. These degraded products are not required to meet the algorithm performance requirements.

Mission Effectivity: S-NPP

Check the JPSS MIS Server at https://jpssmis.gsfc.nasa.gov/frontmenu_dsp.cfm to verify that this is the correct version prior to use.

SRS.01.23_332 The Ozone Total Column EDR software shall use NCEP Surface Pressure extended forecast data for fallback processing when the relevant NCEP current forecast input is not available.

Waiver **474-CCR-16-2851**: Suppress IDPS B2.0 production of Ozone TC EDR using JPSS-1 OMPS data starting with JPSS L3AT/GPAT/GSAT (LG2) acceptance testing and continue the suppression indefinitely. Waive all requirements in JPSS Algorithm Specification Volume I: SRS for the Ozone TC (474-00448-01-23) for JPSS-1 mission and beyond. IDPS B2.0 production of all OMPS TC AP, RDR, SDR, and Ozone TC EDR from S-NPP mission is not affected by this waiver. IDPS B2.0 production of OMPS TC AP, RDR, and SDR from JPSS-1 mission is not affected by this waiver. Relieve the production and performance of Ozone TC EDR from JPSS-1 mission from Block 2 IDPS.

Rationale: The EDR software through its algorithm must generate products using back up data sources to meet the graceful degradation requirement. These degraded products are not required to meet the algorithm performance requirements.

Mission Effectivity: S-NPP

SRS.01.23_323 The Ozone Total Column EDR software shall use TUG87 Surface Pressure [OMPS TC Granulation] for fallback processing when the relevant NCEP Surface Pressure current and extended forecast inputs are not available.

Waiver **474-CCR-16-2851**: Suppress IDPS B2.0 production of Ozone TC EDR using JPSS-1 OMPS data starting with JPSS L3AT/GPAT/GSAT (LG2) acceptance testing and continue the suppression indefinitely. Waive all requirements in JPSS Algorithm Specification Volume I: SRS for the Ozone TC (474-00448-01-23) for JPSS-1 mission and beyond. IDPS B2.0 production of all OMPS TC AP, RDR, SDR, and Ozone TC EDR from S-NPP mission is not affected by this waiver. IDPS B2.0 production of OMPS TC AP, RDR, and SDR from JPSS-1 mission is not affected by this waiver. Relieve the production and performance of Ozone TC EDR from JPSS-1 mission from Block 2 IDPS.

Rationale: The EDR software through its algorithm must generate products using back up data sources to meet the graceful degradation requirement. These degraded products are not required to meet the algorithm performance requirements.

Mission Effectivity: S-NPP

SRS.01.23_334 The Ozone Total Column First Guess IP software shall use TUG87 Surface Pressure [OMPS TC Granulation] for fallback processing when the relevant NCEP Surface Pressure current and extended forecast inputs are not available.

Waiver **474-CCR-16-2851**: Suppress IDPS B2.0 production of Ozone TC EDR using JPSS-1 OMPS data starting with JPSS L3AT/GPAT/GSAT (LG2) acceptance testing and continue the suppression indefinitely. Waive all requirements in JPSS Algorithm Specification Volume I: SRS for the Ozone TC (474-00448-01-23) for JPSS-1 mission and beyond. IDPS B2.0 production of all OMPS TC AP, RDR, SDR, and Ozone TC EDR from S-NPP mission is not affected by this waiver. IDPS B2.0 production of OMPS TC AP, RDR, and SDR from JPSS-1 mission is not affected by this waiver. Relieve the production and performance of Ozone TC EDR from JPSS-1 mission from Block 2 IDPS.

Check the JPSS MIS Server at https://jpssmis.gsfc.nasa.gov/frontmenu_dsp.cfm to verify that this is the correct version prior to use.

Rationale: The IP software through its algorithm must generate products using back up data sources to meet the graceful degradation requirement. These degraded products are not required to meet the algorithm performance requirements.

Mission Effectivity: S-NPP

SRS.01.23_325 The Ozone Total Column First Guess IP software shall use Combined NCEP Extended Forecast/TOMS V8 Climatology Temperature Profile [OMPS TC Granulation] for fallback processing when the relevant combined NCEP/TOMS current forecast input is not available.

Waiver **474-CCR-16-2851**: Suppress IDPS B2.0 production of Ozone TC EDR using JPSS-1 OMPS data starting with JPSS L3AT/GPAT/GSAT (LG2) acceptance testing and continue the suppression indefinitely. Waive all requirements in JPSS Algorithm Specification Volume I: SRS for the Ozone TC (474-00448-01-23) for JPSS-1 mission and beyond. IDPS B2.0 production of all OMPS TC AP, RDR, SDR, and Ozone TC EDR from S-NPP mission is not affected by this waiver. IDPS B2.0 production of OMPS TC AP, RDR, and SDR from JPSS-1 mission is not affected by this waiver. Relieve the production and performance of Ozone TC EDR from JPSS-1 mission from Block 2 IDPS.

Rationale: The EDR software through its algorithm must generate products using back up data sources to meet the graceful degradation requirement. These degraded products are not required to meet the algorithm performance requirements.

Mission Effectivity: S-NPP

SRS.01.23_327 The Ozone Total Column EDR software shall use Combined NCEP Extended Forecast/TOMS V8 Climatology Temperature Profile [OMPS TC Granulation] for fallback processing when the relevant combined NCEP/TOMS current forecast input is not available.

Waiver **474-CCR-16-2851**: Suppress IDPS B2.0 production of Ozone TC EDR using JPSS-1 OMPS data starting with JPSS L3AT/GPAT/GSAT (LG2) acceptance testing and continue the suppression indefinitely. Waive all requirements in JPSS Algorithm Specification Volume I: SRS for the Ozone TC (474-00448-01-23) for JPSS-1 mission and beyond. IDPS B2.0 production of all OMPS TC AP, RDR, SDR, and Ozone TC EDR from S-NPP mission is not affected by this waiver. IDPS B2.0 production of OMPS TC AP, RDR, and SDR from JPSS-1 mission is not affected by this waiver. Relieve the production and performance of Ozone TC EDR from JPSS-1 mission from Block 2 IDPS.

Rationale: The EDR software through its algorithm must generate products using back up data sources to meet the graceful degradation requirement. These degraded products are not required to meet the algorithm performance requirements.

Mission Effectivity: S-NPP

SRS.01.23_335 The Ozone Total Column First Guess IP software shall use Combined NCEP Extended Forecast/TOMS V8 Climatology Temperature Profile [OMPS TC Granulation] for fallback processing when the relevant combined NCEP/TOMS current forecast input is not available.

Check the JPSS MIS Server at https://jpssmis.gsfc.nasa.gov/frontmenu_dsp.cfm to verify that this is the correct version prior to use.

Waiver **474-CCR-16-2851**: Suppress IDPS B2.0 production of Ozone TC EDR using JPSS-1 OMPS data starting with JPSS L3AT/GPAT/GSAT (LG2) acceptance testing and continue the suppression indefinitely. Waive all requirements in JPSS Algorithm Specification Volume I: SRS for the Ozone TC (474-00448-01-23) for JPSS-1 mission and beyond. IDPS B2.0 production of all OMPS TC AP, RDR, SDR, and Ozone TC EDR from S-NPP mission is not affected by this waiver. IDPS B2.0 production of OMPS TC AP, RDR, and SDR from JPSS-1 mission is not affected by this waiver. Relieve the production and performance of Ozone TC EDR from JPSS-1 mission from Block 2 IDPS.

Rationale: The IP software through its algorithm must generate products using back up data sources to meet the graceful degradation requirement. These degraded products are not required to meet the algorithm performance requirements.

Mission Effectivity: S-NPP

SRS.01.23_329 The Ozone Total Column EDR software shall use TOMS V8 Climatology Temperature Profile [OMPS TC granulation] data for fallback processing when the relevant combined NCEP/TOMS current and extended forecast inputs are not available.

Waiver **474-CCR-16-2851**: Suppress IDPS B2.0 production of Ozone TC EDR using JPSS-1 OMPS data starting with JPSS L3AT/GPAT/GSAT (LG2) acceptance testing and continue the suppression indefinitely. Waive all requirements in JPSS Algorithm Specification Volume I: SRS for the Ozone TC (474-00448-01-23) for JPSS-1 mission and beyond. IDPS B2.0 production of all OMPS TC AP, RDR, SDR, and Ozone TC EDR from S-NPP mission is not affected by this waiver. IDPS B2.0 production of OMPS TC AP, RDR, and SDR from JPSS-1 mission is not affected by this waiver. Relieve the production and performance of Ozone TC EDR from JPSS-1 mission from Block 2 IDPS.

Rationale: The EDR software through its algorithm must generate products using back up data sources to meet the graceful degradation requirement. These degraded products are not required to meet the algorithm performance requirements.

Mission Effectivity: S-NPP

SRS.01.23_336 The Ozone Total Column First Guess IP software shall use TOMS V8 Climatology Temperature Profile [OMPS TC granulation] data for fallback processing when the relevant combined NCEP/TOMS current and extended forecast inputs are not available.

Waiver **474-CCR-16-2851**: Suppress IDPS B2.0 production of Ozone TC EDR using JPSS-1 OMPS data starting with JPSS L3AT/GPAT/GSAT (LG2) acceptance testing and continue the suppression indefinitely. Waive all requirements in JPSS Algorithm Specification Volume I: SRS for the Ozone TC (474-00448-01-23) for JPSS-1 mission and beyond. IDPS B2.0 production of all OMPS TC AP, RDR, SDR, and Ozone TC EDR from S-NPP mission is not affected by this waiver. IDPS B2.0 production of OMPS TC AP, RDR, and SDR from JPSS-1 mission is not affected by this waiver. Relieve the production and performance of Ozone TC EDR from JPSS-1 mission from Block 2 IDPS.

Check the JPSS MIS Server at https://jpssmis.gsfc.nasa.gov/frontmenu_dsp.cfm to verify that this is the correct version prior to use.

Rationale: The IP software through its algorithm must generate products using back up data sources to meet the graceful degradation requirement. These degraded products are not required to meet the algorithm performance requirements.

Mission Effectivity: S-NPP

3.2 Algorithm Functional Requirements

3.2.1 Product Production Requirements

Not applicable.

3.2.2 Algorithm Science Requirements

SRS.01.23_281 The Ozone Total Column EDR software shall incorporate a computing algorithm provided for total column ozone.

Waiver **474-CCR-16-2851**: Suppress IDPS B2.0 production of Ozone TC EDR using JPSS-1 OMPS data starting with JPSS L3AT/GPAT/GSAT (LG2) acceptance testing and continue the suppression indefinitely. Waive all requirements in JPSS Algorithm Specification Volume I: SRS for the Ozone TC (474-00448-01-23) for JPSS-1 mission and beyond. IDPS B2.0 production of all OMPS TC AP, RDR, SDR, and Ozone TC EDR from S-NPP mission is not affected by this waiver. IDPS B2.0 production of OMPS TC AP, RDR, and SDR from JPSS-1 mission is not affected by this waiver. Relieve the production and performance of Ozone TC EDR from JPSS-1 mission from Block 2 IDPS.

Rationale: Algorithms are established in accordance with the OMPS Nadir Total Column Ozone, ATBD (D0001-M01-S01-006).

Mission Effectivity: S-NPP

SRS.01.23_282 The Ozone Total Column EDR software shall incorporate a computing algorithm provided for reflectivity.

Waiver **474-CCR-16-2851**: Suppress IDPS B2.0 production of Ozone TC EDR using JPSS-1 OMPS data starting with JPSS L3AT/GPAT/GSAT (LG2) acceptance testing and continue the suppression indefinitely. Waive all requirements in JPSS Algorithm Specification Volume I: SRS for the Ozone TC (474-00448-01-23) for JPSS-1 mission and beyond. IDPS B2.0 production of all OMPS TC AP, RDR, SDR, and Ozone TC EDR from S-NPP mission is not affected by this waiver. IDPS B2.0 production of OMPS TC AP, RDR, and SDR from JPSS-1 mission is not affected by this waiver. Relieve the production and performance of Ozone TC EDR from JPSS-1 mission from Block 2 IDPS.

Rationale: Algorithms are established in accordance with the OMPS Nadir Total Column Ozone, ATBD (D0001-M01-S01-006).

Mission Effectivity: S-NPP

SRS.01.23_283 The Ozone Total Column EDR software shall incorporate a computing algorithm provided for volcanic sulfur dioxide.

Waiver **474-CCR-16-2851**: Suppress IDPS B2.0 production of Ozone TC EDR using JPSS-1 OMPS data starting with JPSS L3AT/GPAT/GSAT (LG2) acceptance testing and continue the suppression indefinitely. Waive all requirements in JPSS Algorithm Specification Volume I: SRS for the Ozone TC (474-00448-01-23) for JPSS-1 mission and beyond. IDPS B2.0 production of all OMPS TC AP, RDR, SDR, and Ozone TC EDR from S-NPP mission is not affected by this waiver. IDPS B2.0 production of OMPS TC AP, RDR, and SDR from JPSS-1 mission is not affected by this waiver. Relieve the production and performance of Ozone TC EDR from JPSS-1 mission from Block 2 IDPS.

Rationale: Algorithms are established in accordance with the OMPS Nadir Total Column Ozone, ATBD (D0001-M01-S01-006).

Mission Effectivity: S-NPP

SRS.01.23_284 The Ozone Total Column EDR software shall incorporate a computing algorithm provided for aerosol index.

Waiver **474-CCR-16-2851**: Suppress IDPS B2.0 production of Ozone TC EDR using JPSS-1 OMPS data starting with JPSS L3AT/GPAT/GSAT (LG2) acceptance testing and continue the suppression indefinitely. Waive all requirements in JPSS Algorithm Specification Volume I: SRS for the Ozone TC (474-00448-01-23) for JPSS-1 mission and beyond. IDPS B2.0 production of all OMPS TC AP, RDR, SDR, and Ozone TC EDR from S-NPP mission is not affected by this waiver. IDPS B2.0 production of OMPS TC AP, RDR, and SDR from JPSS-1 mission is not affected by this waiver. Relieve the production and performance of Ozone TC EDR from JPSS-1 mission from Block 2 IDPS.

Rationale: Algorithms are established in accordance with the OMPS Nadir Total Column Ozone, ATBD (D0001-M01-S01-006).

Mission Effectivity: S-NPP

SRS.01.23_285 The Ozone Total Column EDR software shall incorporate a computing algorithm provided for normalized earth view radiances.

Waiver **474-CCR-16-2851**: Suppress IDPS B2.0 production of Ozone TC EDR using JPSS-1 OMPS data starting with JPSS L3AT/GPAT/GSAT (LG2) acceptance testing and continue the suppression indefinitely. Waive all requirements in JPSS Algorithm Specification Volume I: SRS for the Ozone TC (474-00448-01-23) for JPSS-1 mission and beyond. IDPS B2.0 production of all OMPS TC AP, RDR, SDR, and Ozone TC EDR from S-NPP mission is not affected by this waiver. IDPS B2.0 production of OMPS TC AP, RDR, and SDR from JPSS-1 mission is not affected by this waiver. Relieve the production and performance of Ozone TC EDR from JPSS-1 mission from Block 2 IDPS.

Rationale: Algorithms are established in accordance with the OMPS Nadir Total Column Ozone, ATBD (D0001-M01-S01-006).

Mission Effectivity: S-NPP

SRS.01.23_286 The Ozone Total Column EDR software shall incorporate a computing algorithm provided for reporting other JPSS data products.

Waiver **474-CCR-16-2851**: Suppress IDPS B2.0 production of Ozone TC EDR using JPSS-1 OMPS data starting with JPSS L3AT/GPAT/GSAT (LG2) acceptance testing and continue the suppression indefinitely. Waive all requirements in JPSS Algorithm Specification Volume I: SRS for the Ozone TC (474-00448-01-23) for JPSS-1 mission and beyond. IDPS B2.0 production of all OMPS TC AP, RDR, SDR, and Ozone TC EDR from S-NPP mission is not affected by this waiver. IDPS B2.0 production of OMPS TC AP, RDR, and SDR from JPSS-1 mission is not affected by this waiver. Relieve the production and performance of Ozone TC EDR from JPSS-1 mission from Block 2 IDPS.

Rationale: Algorithms are established in accordance with the OMPS Nadir Total Column Ozone, ATBD (D0001-M01-S01-006).

Mission Effectivity: S-NPP

SRS.01.23_287 The Ozone Total Column EDR software shall incorporate a computing algorithm provided for calibration parameters reported in the product.

Waiver **474-CCR-16-2851**: Suppress IDPS B2.0 production of Ozone TC EDR using JPSS-1 OMPS data starting with JPSS L3AT/GPAT/GSAT (LG2) acceptance testing and continue the suppression indefinitely. Waive all requirements in JPSS Algorithm Specification Volume I: SRS for the Ozone TC (474-00448-01-23) for JPSS-1 mission and beyond. IDPS B2.0 production of all OMPS TC AP, RDR, SDR, and Ozone TC EDR from S-NPP mission is not affected by this waiver. IDPS B2.0 production of OMPS TC AP, RDR, and SDR from JPSS-1 mission is not affected by this waiver. Relieve the production and performance of Ozone TC EDR from JPSS-1 mission from Block 2 IDPS.

Rationale: Algorithms are established in accordance with the OMPS Nadir Total Column Ozone, ATBD (D0001-M01-S01-006).

Mission Effectivity: S-NPP

SRS.01.23_288 The Ozone Total Column EDR software shall incorporate a computing algorithm provided for tropospheric ozone estimates.

Waiver **474-CCR-16-2851**: Suppress IDPS B2.0 production of Ozone TC EDR using JPSS-1 OMPS data starting with JPSS L3AT/GPAT/GSAT (LG2) acceptance testing and continue the suppression indefinitely. Waive all requirements in JPSS Algorithm Specification Volume I: SRS for the Ozone TC (474-00448-01-23) for JPSS-1 mission and beyond. IDPS B2.0 production of all OMPS TC AP, RDR, SDR, and Ozone TC EDR from S-NPP mission is not affected by this waiver. IDPS B2.0 production of OMPS TC AP, RDR, and SDR from JPSS-1 mission is not affected by this waiver. Relieve the production and performance of Ozone TC EDR from JPSS-1 mission from Block 2 IDPS.

Rationale: Algorithms are established in accordance with the OMPS Nadir Total Column Ozone, ATBD (D0001-M01-S01-006).

Mission Effectivity: S-NPP

SRS.01.23_289 The Ozone Total Column EDR software shall incorporate a computing algorithm provided for cloud fraction.

Waiver **474-CCR-16-2851**: Suppress IDPS B2.0 production of Ozone TC EDR using JPSS-1 OMPS data starting with JPSS L3AT/GPAT/GSAT (LG2) acceptance testing and continue the suppression indefinitely. Waive all requirements in JPSS Algorithm Specification Volume I: SRS for the Ozone TC (474-00448-01-23) for JPSS-1 mission and beyond. IDPS B2.0 production of all OMPS TC AP, RDR, SDR, and Ozone TC EDR from S-NPP mission is not affected by this waiver. IDPS B2.0 production of OMPS TC AP, RDR, and SDR from JPSS-1 mission is not affected by this waiver. Relieve the production and performance of Ozone TC EDR from JPSS-1 mission from Block 2 IDPS.

Rationale: Algorithms are established in accordance with the OMPS Nadir Total Column Ozone, ATBD (D0001-M01-S01-006).

Mission Effectivity: S-NPP

SRS.01.23_290 The Ozone Total Column EDR software shall incorporate a computing algorithm provided for quality description.

Waiver **474-CCR-16-2851**: Suppress IDPS B2.0 production of Ozone TC EDR using JPSS-1 OMPS data starting with JPSS L3AT/GPAT/GSAT (LG2) acceptance testing and continue the suppression indefinitely. Waive all requirements in JPSS Algorithm Specification Volume I: SRS for the Ozone TC (474-00448-01-23) for JPSS-1 mission and beyond. IDPS B2.0 production of all OMPS TC AP, RDR, SDR, and Ozone TC EDR from S-NPP mission is not affected by this waiver. IDPS B2.0 production of OMPS TC AP, RDR, and SDR from JPSS-1 mission is not affected by this waiver. Relieve the production and performance of Ozone TC EDR from JPSS-1 mission from Block 2 IDPS.

Rationale: Algorithms are established in accordance with the OMPS Nadir Total Column Ozone, ATBD (D0001-M01-S01-006).

Mission Effectivity: S-NPP

SRS.01.23_305 The Ozone Total Column First Guess IP software shall incorporate a computing algorithm provided for total column ozone.

Waiver **474-CCR-16-2851**: Suppress IDPS B2.0 production of Ozone TC EDR using JPSS-1 OMPS data starting with JPSS L3AT/GPAT/GSAT (LG2) acceptance testing and continue the suppression indefinitely. Waive all requirements in JPSS Algorithm Specification Volume I: SRS for the Ozone TC (474-00448-01-23) for JPSS-1 mission and beyond. IDPS B2.0 production of all OMPS TC AP, RDR, SDR, and Ozone TC EDR from S-NPP mission is not affected by this waiver. IDPS B2.0 production of OMPS TC AP, RDR, and SDR from JPSS-1 mission is not affected by this waiver. Relieve the production and performance of Ozone TC EDR from JPSS-1 mission from Block 2 IDPS.

Rationale: Algorithms are established in accordance with the OMPS Nadir Total Column Ozone, ATBD (D0001-M01-S01-006).

Mission Effectivity: S-NPP

SRS.01.23_306 The Ozone Total Column First Guess IP software shall incorporate a computing algorithm provided for reflectivity.

Waiver **474-CCR-16-2851**: Suppress IDPS B2.0 production of Ozone TC EDR using JPSS-1 OMPS data starting with JPSS L3AT/GPAT/GSAT (LG2) acceptance testing and continue the suppression indefinitely. Waive all requirements in JPSS Algorithm Specification Volume I: SRS for the Ozone TC (474-00448-01-23) for JPSS-1 mission and beyond. IDPS B2.0 production of all OMPS TC AP, RDR, SDR, and Ozone TC EDR from S-NPP mission is not affected by this waiver. IDPS B2.0 production of OMPS TC AP, RDR, and SDR from JPSS-1 mission is not affected by this waiver. Relieve the production and performance of Ozone TC EDR from JPSS-1 mission from Block 2 IDPS.

Rationale: Algorithms are established in accordance with the OMPS Nadir Total Column Ozone, ATBD (D0001-M01-S01-006).

Mission Effectivity: S-NPP

SRS.01.23_307 The Ozone Total Column First Guess IP software shall incorporate a computing algorithm provided for volcanic sulfur dioxide.

Waiver **474-CCR-16-2851**: Suppress IDPS B2.0 production of Ozone TC EDR using JPSS-1 OMPS data starting with JPSS L3AT/GPAT/GSAT (LG2) acceptance testing and continue the suppression indefinitely. Waive all requirements in JPSS Algorithm Specification Volume I: SRS for the Ozone TC (474-00448-01-23) for JPSS-1 mission and beyond. IDPS B2.0 production of all OMPS TC AP, RDR, SDR, and Ozone TC EDR from S-NPP mission is not affected by this waiver. IDPS B2.0 production of OMPS TC AP, RDR, and SDR from JPSS-1 mission is not affected by this waiver. Relieve the production and performance of Ozone TC EDR from JPSS-1 mission from Block 2 IDPS.

Rationale: Algorithms are established in accordance with the OMPS Nadir Total Column Ozone, ATBD (D0001-M01-S01-006).

Mission Effectivity: S-NPP

SRS.01.23_308 The Ozone Total Column First Guess IP software shall incorporate a computing algorithm provided for aerosol index.

Waiver **474-CCR-16-2851**: Suppress IDPS B2.0 production of Ozone TC EDR using JPSS-1 OMPS data starting with JPSS L3AT/GPAT/GSAT (LG2) acceptance testing and continue the suppression indefinitely. Waive all requirements in JPSS Algorithm Specification Volume I: SRS for the Ozone TC (474-00448-01-23) for JPSS-1 mission and beyond. IDPS B2.0 production of all OMPS TC AP, RDR, SDR, and Ozone TC EDR from S-NPP mission is not affected by this waiver. IDPS B2.0 production of OMPS TC AP, RDR, and SDR from JPSS-1 mission is not affected by this waiver. Relieve the production and performance of Ozone TC EDR from JPSS-1 mission from Block 2 IDPS.

Rationale: Algorithms are established in accordance with the OMPS Nadir Total Column Ozone, ATBD (D0001-M01-S01-006).

Mission Effectivity: S-NPP

SRS.01.23_309 The Ozone Total Column First Guess IP software shall incorporate a computing algorithm provided for normalized earth view radiances.

Waiver **474-CCR-16-2851**: Suppress IDPS B2.0 production of Ozone TC EDR using JPSS-1 OMPS data starting with JPSS L3AT/GPAT/GSAT (LG2) acceptance testing and continue the suppression indefinitely. Waive all requirements in JPSS Algorithm Specification Volume I: SRS for the Ozone TC (474-00448-01-23) for JPSS-1 mission and beyond. IDPS B2.0 production of all OMPS TC AP, RDR, SDR, and Ozone TC EDR from S-NPP mission is not affected by this waiver. IDPS B2.0 production of OMPS TC AP, RDR, and SDR from JPSS-1 mission is not affected by this waiver. Relieve the production and performance of Ozone TC EDR from JPSS-1 mission from Block 2 IDPS.

Rationale: Algorithms are established in accordance with the OMPS Nadir Total Column Ozone, ATBD (D0001-M01-S01-006).

Mission Effectivity: S-NPP

SRS.01.23_310 The Ozone Total Column First Guess IP software shall incorporate a computing algorithm provided for reporting other JPSS data products.

Waiver **474-CCR-16-2851**: Suppress IDPS B2.0 production of Ozone TC EDR using JPSS-1 OMPS data starting with JPSS L3AT/GPAT/GSAT (LG2) acceptance testing and continue the suppression indefinitely. Waive all requirements in JPSS Algorithm Specification Volume I: SRS for the Ozone TC (474-00448-01-23) for JPSS-1 mission and beyond. IDPS B2.0 production of all OMPS TC AP, RDR, SDR, and Ozone TC EDR from S-NPP mission is not affected by this waiver. IDPS B2.0 production of OMPS TC AP, RDR, and SDR from JPSS-1 mission is not affected by this waiver. Relieve the production and performance of Ozone TC EDR from JPSS-1 mission from Block 2 IDPS.

Rationale: Algorithms are established in accordance with the OMPS Nadir Total Column Ozone, ATBD (D0001-M01-S01-006).

Mission Effectivity: S-NPP

SRS.01.23_311 The Ozone Total Column First Guess IP software shall incorporate a computing algorithm provided for calibration parameters reported in the product.

Waiver **474-CCR-16-2851**: Suppress IDPS B2.0 production of Ozone TC EDR using JPSS-1 OMPS data starting with JPSS L3AT/GPAT/GSAT (LG2) acceptance testing and continue the suppression indefinitely. Waive all requirements in JPSS Algorithm Specification Volume I: SRS for the Ozone TC (474-00448-01-23) for JPSS-1 mission and beyond. IDPS B2.0 production of all OMPS TC AP, RDR, SDR, and Ozone TC EDR from S-NPP mission is not affected by this waiver. IDPS B2.0 production of OMPS TC AP, RDR, and SDR from JPSS-1 mission is not affected by this waiver. Relieve the production and performance of Ozone TC EDR from JPSS-1 mission from Block 2 IDPS.

Rationale: Algorithms are established in accordance with the OMPS Nadir Total Column Ozone, ATBD (D0001-M01-S01-006).

Mission Effectivity: S-NPP

SRS.01.23_312 The Ozone Total Column First Guess IP software shall incorporate a computing algorithm provided for tropospheric ozone estimates.

Check the JPSS MIS Server at https://jpssmis.gsfc.nasa.gov/frontmenu_dsp.cfm to verify that this is the correct version prior to use.

Waiver **474-CCR-16-2851**: Suppress IDPS B2.0 production of Ozone TC EDR using JPSS-1 OMPS data starting with JPSS L3AT/GPAT/GSAT (LG2) acceptance testing and continue the suppression indefinitely. Waive all requirements in JPSS Algorithm Specification Volume I: SRS for the Ozone TC (474-00448-01-23) for JPSS-1 mission and beyond. IDPS B2.0 production of all OMPS TC AP, RDR, SDR, and Ozone TC EDR from S-NPP mission is not affected by this waiver. IDPS B2.0 production of OMPS TC AP, RDR, and SDR from JPSS-1 mission is not affected by this waiver. Relieve the production and performance of Ozone TC EDR from JPSS-1 mission from Block 2 IDPS.

Rationale: Algorithms are established in accordance with the OMPS Nadir Total Column Ozone, ATBD (D0001-M01-S01-006).

Mission Effectivity: S-NPP

SRS.01.23_313 The Ozone Total Column First Guess IP software shall incorporate a computing algorithm provided for cloud fraction.

Waiver **474-CCR-16-2851**: Suppress IDPS B2.0 production of Ozone TC EDR using JPSS-1 OMPS data starting with JPSS L3AT/GPAT/GSAT (LG2) acceptance testing and continue the suppression indefinitely. Waive all requirements in JPSS Algorithm Specification Volume I: SRS for the Ozone TC (474-00448-01-23) for JPSS-1 mission and beyond. IDPS B2.0 production of all OMPS TC AP, RDR, SDR, and Ozone TC EDR from S-NPP mission is not affected by this waiver. IDPS B2.0 production of OMPS TC AP, RDR, and SDR from JPSS-1 mission is not affected by this waiver. Relieve the production and performance of Ozone TC EDR from JPSS-1 mission from Block 2 IDPS.

Rationale: Algorithms are established in accordance with the OMPS Nadir Total Column Ozone, ATBD (D0001-M01-S01-006).

Mission Effectivity: S-NPP

SRS.01.23_314 The Ozone Total Column First Guess IP software shall incorporate a computing algorithm provided for quality description.

Waiver **474-CCR-16-2851**: Suppress IDPS B2.0 production of Ozone TC EDR using JPSS-1 OMPS data starting with JPSS L3AT/GPAT/GSAT (LG2) acceptance testing and continue the suppression indefinitely. Waive all requirements in JPSS Algorithm Specification Volume I: SRS for the Ozone TC (474-00448-01-23) for JPSS-1 mission and beyond. IDPS B2.0 production of all OMPS TC AP, RDR, SDR, and Ozone TC EDR from S-NPP mission is not affected by this waiver. IDPS B2.0 production of OMPS TC AP, RDR, and SDR from JPSS-1 mission is not affected by this waiver. Relieve the production and performance of Ozone TC EDR from JPSS-1 mission from Block 2 IDPS.

Rationale: Algorithms are established in accordance with the OMPS Nadir Total Column Ozone, ATBD (D0001-M01-S01-006).

Mission Effectivity: S-NPP

Check the JPSS MIS Server at https://jpssmis.gsfc.nasa.gov/frontmenu_dsp.cfm to verify that this is the correct version prior to use.

3.2.3 Algorithm Exception Handling

SRS.01.23_291 The Ozone Total Column EDR software shall set <FillField> to indicated <FillValue> for <FillCondition> specified in the JPSS Algorithm Specification, Vol IV: SRSPF for the Ozone Total Column (474-00448-04-23) <TC_EDR> <fill>.

Waiver **474-CCR-16-2851**: Suppress IDPS B2.0 production of Ozone TC EDR using JPSS-1 OMPS data starting with JPSS L3AT/GPAT/GSAT (LG2) acceptance testing and continue the suppression indefinitely. Waive all requirements in JPSS Algorithm Specification Volume I: SRS for the Ozone TC (474-00448-01-23) for JPSS-1 mission and beyond. IDPS B2.0 production of all OMPS TC AP, RDR, SDR, and Ozone TC EDR from S-NPP mission is not affected by this waiver. IDPS B2.0 production of OMPS TC AP, RDR, and SDR from JPSS-1 mission is not affected by this waiver. Relieve the production and performance of Ozone TC EDR from JPSS-1 mission from Block 2 IDPS.

Mission Effectivity: S-NPP

SRS.01.23_316 The Ozone Total Column First Guess IP software shall set <FillField> to indicated <FillValue> for <FillCondition> specified in the JPSS Algorithm Specification, Vol IV: SRSPF for the Ozone Total Column (474-00448-04-23) <TC_First_Guess_IP> <fill>.

Waiver **474-CCR-16-2851**: Suppress IDPS B2.0 production of Ozone TC EDR using JPSS-1 OMPS data starting with JPSS L3AT/GPAT/GSAT (LG2) acceptance testing and continue the suppression indefinitely. Waive all requirements in JPSS Algorithm Specification Volume I: SRS for the Ozone TC (474-00448-01-23) for JPSS-1 mission and beyond. IDPS B2.0 production of all OMPS TC AP, RDR, SDR, and Ozone TC EDR from S-NPP mission is not affected by this waiver. IDPS B2.0 production of OMPS TC AP, RDR, and SDR from JPSS-1 mission is not affected by this waiver. Relieve the production and performance of Ozone TC EDR from JPSS-1 mission from Block 2 IDPS.

Mission Effectivity: S-NPP

3.3 External Interfaces

3.3.1 Inputs

SRS.01.23_333 The Ozone Total Column EDR software shall incorporate inputs as specified in Table 3-1.

Waiver **474-CCR-16-2851**: Suppress IDPS B2.0 production of Ozone TC EDR using JPSS-1 OMPS data starting with JPSS L3AT/GPAT/GSAT (LG2) acceptance testing and continue the suppression indefinitely. Waive all requirements in JPSS Algorithm Specification Volume I: SRS for the Ozone TC (474-00448-01-23) for JPSS-1 mission and beyond. IDPS B2.0 production of all OMPS TC AP, RDR, SDR, and Ozone TC EDR from S-NPP mission is not affected by this waiver. IDPS B2.0 production of OMPS TC AP, RDR, and SDR from JPSS-1 mission is not affected by this waiver. Relieve the production and performance of Ozone TC EDR from JPSS-1 mission from Block 2 IDPS.

Check the JPSS MIS Server at https://jpssmis.gsfc.nasa.gov/frontmenu_dsp.cfm to verify that this is the correct version prior to use.

Rationale: The EDR software must be able to receive and process the resource interaction items shown in Table 3-1 in order to produce the intended Ozone Total Column products.

Mission Effectivity: S-NPP

SRS.01.23_337 The Ozone Total Column First Guess IP software shall incorporate inputs as specified in Table 3-1.

Waiver **474-CCR-16-2851**: Suppress IDPS B2.0 production of Ozone TC EDR using JPSS-1 OMPS data starting with JPSS L3AT/GPAT/GSAT (LG2) acceptance testing and continue the suppression indefinitely. Waive all requirements in JPSS Algorithm Specification Volume I: SRS for the Ozone TC (474-00448-01-23) for JPSS-1 mission and beyond. IDPS B2.0 production of all OMPS TC AP, RDR, SDR, and Ozone TC EDR from S-NPP mission is not affected by this waiver. IDPS B2.0 production of OMPS TC AP, RDR, and SDR from JPSS-1 mission is not affected by this waiver. Relieve the production and performance of Ozone TC EDR from JPSS-1 mission from Block 2 IDPS.

Rationale: The IP software must be able to receive and process the resource interaction items shown in Table 3-1 in order to produce the intended Ozone Total Column products.

Mission Effectivity: S-NPP

SRS.01.23_339 The Ozone TC EDR software shall ingest tables and coefficients formatted in accordance with Section 7 of the JPSS Algorithm Specification Vol II: Data Dictionary for Ozone TC (474-00448-02-23).

Waiver **474-CCR-16-2851**: Suppress IDPS B2.0 production of Ozone TC EDR using JPSS-1 OMPS data starting with JPSS L3AT/GPAT/GSAT (LG2) acceptance testing and continue the suppression indefinitely. Waive all requirements in JPSS Algorithm Specification Volume I: SRS for the Ozone TC (474-00448-01-23) for JPSS-1 mission and beyond. IDPS B2.0 production of all OMPS TC AP, RDR, SDR, and Ozone TC EDR from S-NPP mission is not affected by this waiver. IDPS B2.0 production of OMPS TC AP, RDR, and SDR from JPSS-1 mission is not affected by this waiver. Relieve the production and performance of Ozone TC EDR from JPSS-1 mission from Block 2 IDPS.

Rationale: This defines the formats for Lookup Tables, and Processing Coefficients for input into the algorithm module.

Mission Effectivity: S-NPP

Table 3-1 and Figure 3-1 are best viewed together since they describe the processes governed by this SRS in different ways. The figure diagrams the data flowing into, out of, and within the code governed by this SRS. The table lists these same data interactions as well as all downstream dependencies for outputs from this SRS.

Each row in the table describes a single software interaction - data flowing from one software item to another. The data is listed in the first column. The second and third columns includes the short name and mnemonic for the data. Blanks indicate there is no mnemonic. The fourth and fifth columns contain the SRS that generates the data product(s) in the first column, and the SRS that receives those products. The final two columns contain the actual function name in Algorithm Development Library (ADL) that produces those products, and the function that

inputs those products. The SRS's titled "Ingest MSD" and "Store/Retrieve" are non-existent SRS's functioning as data handling for the IDPS. The software functions "Store Products" and "Retrieve Products" are similar non-existent functions that operate as IDPS data handling.

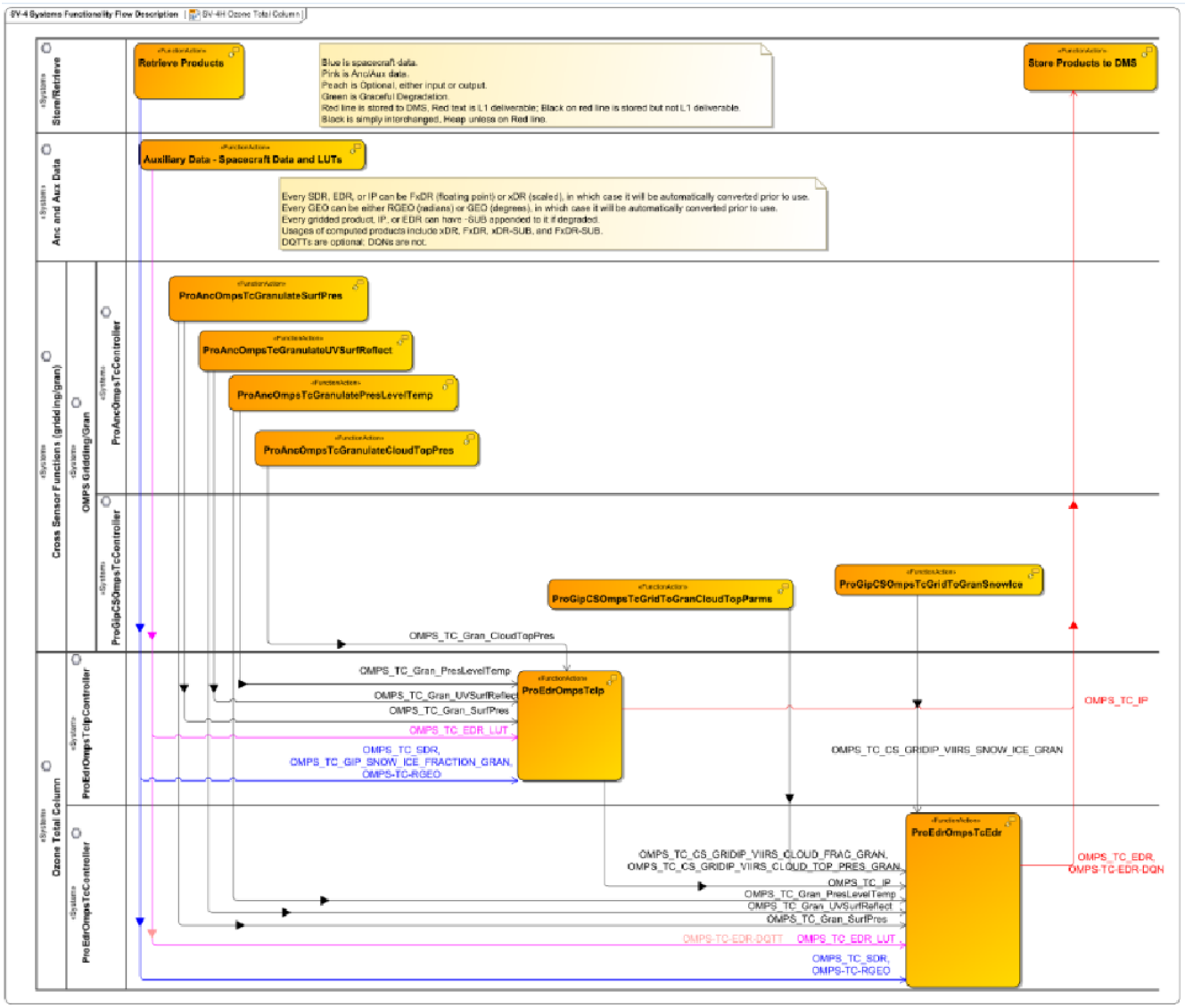

Figure: 3-1 Ozone Total Column Data Flows

Check the JPSS MIS Server at https://jpssmis.gsfc.nasa.gov/frontmenu_dsp.cfm to verify that this is the correct version prior to use.

Table: 3-1 Systems Resource Flow Matrix: Ozone Total Column

	Data Product Name	Collection Short Name	Mnemonic	Sending SRS	Receiving SRS	Sending Function	Receiving Function
1	•OMPS_TC_SDR •OMPS-TC-RGEO	•OMPS-TC-SDR •OMPS-TC-GEO	•SDRE-OMTC-C0030 •None	Store/Retrieve (OMPS TC SDR)	Ozone Total Column	Retrieve Products	ProEdrOmpsTcEdr
2	•OMPS_TC_SDR •OMPS_TC_GIP_SNOW_ICE_FRACTION_GRAN •OMPS-TC-RGEO	•OMPS-TC-SDR •OMPS-TC-GridIP-VIIRS-Snow-Ice-Fraction-Gran •OMPS-TC-GEO	•SDRE-OMTC-C0030 •None •None	Store/Retrieve (OMPS TC SDR)	Ozone Total Column	Retrieve Products	ProEdrOmpsTcIp
3	•OMPS-TC-EDR-DQTT	•OMPS-TC-EDR-DQTT	•DP_NU-LM2030-000	Anc and Aux Data	Ozone Total Column	Auxiliary Data - Spacecraft Data and LUTs	ProEdrOmpsTcEdr
4	•OMPS_TC_EDR_LUT	•OMPS-TC-EDR-LUT	•NP_NU-LM0240-128	Anc and Aux Data	Ozone Total Column	Auxiliary Data - Spacecraft Data and LUTs	ProEdrOmpsTcEdr
5	•OMPS_TC_EDR_LUT	•OMPS-TC-EDR-LUT	•NP_NU-LM0240-128	Anc and Aux Data	Ozone Total Column	Auxiliary Data - Spacecraft Data and LUTs	ProEdrOmpsTcIp
6	•OMPS_TC_CS_GRIDIP_VIIRS_CLOUD_FRAC_GRAN •OMPS_TC_CS_GRIDIP_VIIRS_CLOUD_TOP_PRES_GRAN	•OMPS-TC-CS-GridIP-VIIRS-Cloud-Frac-Gran •OMPS-TC-CS-GridIP-VIIRS-Cloud-Top-Pres-Gran	•None •None	Grid Gran	Ozone Total Column	ProGipCSOmpsTcGridToGranCloudTopParms	ProEdrOmpsTcEdr
7	•OMPS_TC_CS_GRIDIP_VIIRS_SNOW_ICE_GRAN	•OMPS-TC-CS-GridIP-VIIRS-Snow-Ice-Gran	•None	Grid Gran	Ozone Total Column	ProGipCSOmpsTcGridToGranSnowIce	ProEdrOmpsTcEdr
8	•OMPS_TC_Gran_UVSurfReflect	•OMPS-TC-ANC-UV-Surf-Reflect-Gran	•None	Grid Gran	Ozone Total Column	ProAncOmpsTcGranulateUVSurfReflect	ProEdrOmpsTcEdr
9	•OMPS_TC_Gran_SurfPres	•OMPS-TC-ANC-Press-Surf-Gran	•None	Grid Gran	Ozone Total Column	ProAncOmpsTcGranulateSurfPres	ProEdrOmpsTcEdr
10	•OMPS_TC_Gran_PresLevelTemp	•OMPS-TC-ANC-Temp-Press-Lay-Gran	•None	Grid Gran	Ozone Total Column	ProAncOmpsTcGranulatePres	ProEdrOmpsTcEdr

Check the JPSS MIS Server at https://jpssmis.gsfc.nasa.gov/frontmenu_dsp.cfm to verify that this is the correct version prior to use.

	Data Product Name	Collection Short Name	Mnemonic	Sending SRS	Receiving SRS	Sending Function	Receiving Function
						LevelTemp	
11	•OMPS_TC_IP	•OMPS-TC-Oz-Fst-Guess-IP	•IMPI_NTCO_R0100	Ozone Total Column	Ozone Total Column	ProEdrOmpsTcIp	ProEdrOmpsTcEdr
12	•OMPS_TC_Gran_UVSurfReflect	•OMPS-TC-ANC-UV-Surf-Reflect-Gran	•None	Grid Gran	Ozone Total Column	ProAncOmpsTcGranulateUVSurfReflect	ProEdrOmpsTcIp
13	•OMPS_TC_Gran_PresLevelTemp	•OMPS-TC-ANC-Temp-Press-Lay-Gran	•None	Grid Gran	Ozone Total Column	ProAncOmpsTcGranulatePresLevelTemp	ProEdrOmpsTcIp
14	•OMPS_TC_Gran_CloudTopPres	•OMPS-TC-ANC-Cd-Top-Pres-Gran	•None	Grid Gran	Ozone Total Column	ProAncOmpsTcGranulateCloudTopPres	ProEdrOmpsTcIp
15	•OMPS_TC_Gran_SurfPres	•OMPS-TC-ANC-Press-Surf-Gran	•None	Grid Gran	Ozone Total Column	ProAncOmpsTcGranulateSurfPres	ProEdrOmpsTcIp
16	•OMPS_TC_EDR •OMPS-TC-EDR-DQN	•OMPS-TC-EDR •OMPS-TC-EDR-DQN	•EDRE-OMTC-C0030 •DP_NU-L00510-000	Ozone Total Column	Store/Retrieve	ProEdrOmpsTcEdr	Store Products to DMS
17	•OMPS_TC_IP	•OMPS-TC-Oz-Fst-Guess-IP	•IMPI_NTCO_R0100	Ozone Total Column	Store/Retrieve	ProEdrOmpsTcIp	Store Products to DMS

Check the JPSS MIS Server at https://jpssmis.gsfc.nasa.gov/frontmenu_dsp.cfm to verify that this is the correct version prior to use.

3.3.2 Outputs

SRS.01.23_292 The Ozone Total Column EDR software shall generate the ozone total column EDR product in conformance with the XML format file in Attachment A.1 of the JPSS Algorithm Specification, Vol II: Data Dictionary for the Ozone Total Column (474-00448-02-23).

Waiver **474-CCR-16-2851**: Suppress IDPS B2.0 production of Ozone TC EDR using JPSS-1 OMPS data starting with JPSS L3AT/GPAT/GSAT (LG2) acceptance testing and continue the suppression indefinitely. Waive all requirements in JPSS Algorithm Specification Volume I: SRS for the Ozone TC (474-00448-01-23) for JPSS-1 mission and beyond. IDPS B2.0 production of all OMPS TC AP, RDR, SDR, and Ozone TC EDR from S-NPP mission is not affected by this waiver. IDPS B2.0 production of OMPS TC AP, RDR, and SDR from JPSS-1 mission is not affected by this waiver. Relieve the production and performance of Ozone TC EDR from JPSS-1 mission from Block 2 IDPS.

Rationale: The product profile must conform to the XML format file.

Mission Effectivity: S-NPP

SRS.01.23_317 The Ozone Total Column First Guess IP software shall generate the ozone total column First Guess IP product in conformance with the XML format file in Attachment A.2 of the JPSS Algorithm Specification, Vol II: Data Dictionary for the Ozone Total Column (474-00448-02-23).

Waiver **474-CCR-16-2851**: Suppress IDPS B2.0 production of Ozone TC EDR using JPSS-1 OMPS data starting with JPSS L3AT/GPAT/GSAT (LG2) acceptance testing and continue the suppression indefinitely. Waive all requirements in JPSS Algorithm Specification Volume I: SRS for the Ozone TC (474-00448-01-23) for JPSS-1 mission and beyond. IDPS B2.0 production of all OMPS TC AP, RDR, SDR, and Ozone TC EDR from S-NPP mission is not affected by this waiver. IDPS B2.0 production of OMPS TC AP, RDR, and SDR from JPSS-1 mission is not affected by this waiver. Relieve the production and performance of Ozone TC EDR from JPSS-1 mission from Block 2 IDPS.

Rationale: The product profile must conform to the XML format file.

Mission Effectivity: S-NPP

SRS.01.23_293 The Ozone Total Column EDR software shall use the geolocation for the OMPS Total Column Science SDR.

Waiver **474-CCR-16-2851**: Suppress IDPS B2.0 production of Ozone TC EDR using JPSS-1 OMPS data starting with JPSS L3AT/GPAT/GSAT (LG2) acceptance testing and continue the suppression indefinitely. Waive all requirements in JPSS Algorithm Specification Volume I: SRS for the Ozone TC (474-00448-01-23) for JPSS-1 mission and beyond. IDPS B2.0 production of all OMPS TC AP, RDR, SDR, and Ozone TC EDR from S-NPP mission is not affected by this waiver. IDPS B2.0 production of OMPS TC AP, RDR, and SDR from JPSS-1 mission is not affected by this waiver. Relieve the production and performance of Ozone TC EDR from JPSS-1 mission from Block 2 IDPS.

Rationale: The product must be associated with the geolocation products.

Mission Effectivity: S-NPP

SRS.01.23_318 The Ozone Total Column First Guess IP software shall use the geolocation for the OMPS Total Column Science SDR.

Waiver **474-CCR-16-2851**: Suppress IDPS B2.0 production of Ozone TC EDR using JPSS-1 OMPS data starting with JPSS L3AT/GPAT/GSAT (LG2) acceptance testing and continue the suppression indefinitely. Waive all requirements in JPSS Algorithm Specification Volume I: SRS for the Ozone TC (474-00448-01-23) for JPSS-1 mission and beyond. IDPS B2.0 production of all OMPS TC AP, RDR, SDR, and Ozone TC EDR from S-NPP mission is not affected by this waiver. IDPS B2.0 production of OMPS TC AP, RDR, and SDR from JPSS-1 mission is not affected by this waiver. Relieve the production and performance of Ozone TC EDR from JPSS-1 mission from Block 2 IDPS.

Rationale: The product must be associated with the geolocation to meet the geolocation accuracy requirement.

Mission Effectivity: S-NPP

3.4 Science Standards

Not applicable.

3.5 Metadata Output

Not applicable.

3.6 Quality Flag Content Requirements

SRS.01.23_304 The Ozone Total Column EDR software shall report for each <FlagScope> quality flags using <FlagLogic> as specified in the JPSS Algorithm Specification, Vol IV: SRSPF for the Ozone Total Column (474-00448-04-23) <TC_EDR><QF>.

Waiver **474-CCR-16-2851**: Suppress IDPS B2.0 production of Ozone TC EDR using JPSS-1 OMPS data starting with JPSS L3AT/GPAT/GSAT (LG2) acceptance testing and continue the suppression indefinitely. Waive all requirements in JPSS Algorithm Specification Volume I: SRS for the Ozone TC (474-00448-01-23) for JPSS-1 mission and beyond. IDPS B2.0 production of all OMPS TC AP, RDR, SDR, and Ozone TC EDR from S-NPP mission is not affected by this waiver. IDPS B2.0 production of OMPS TC AP, RDR, and SDR from JPSS-1 mission is not affected by this waiver. Relieve the production and performance of Ozone TC EDR from JPSS-1 mission from Block 2 IDPS.

Rationale: Quality Flags must be generated based on the established flag conditions, logic, and format.

Mission Effectivity: S-NPP

SRS.01.23_319 The Ozone Total Column First Guess IP software shall report for each <FlagScope> quality flags using <FlagLogic> as specified in the JPSS

Check the JPSS MIS Server at https://jpssmis.gsfc.nasa.gov/frontmenu_dsp.cfm to verify that this is the correct version prior to use.

Algorithm Specification, Vol IV: SRSPF for the Ozone Total Column (474-00448-04-23) <TC_First Guess_IP><QF>.

Waiver **474-CCR-16-2851**: Suppress IDPS B2.0 production of Ozone TC EDR using JPSS-1 OMPS data starting with JPSS L3AT/GPAT/GSAT (LG2) acceptance testing and continue the suppression indefinitely. Waive all requirements in JPSS Algorithm Specification Volume I: SRS for the Ozone TC (474-00448-01-23) for JPSS-1 mission and beyond. IDPS B2.0 production of all OMPS TC AP, RDR, SDR, and Ozone TC EDR from S-NPP mission is not affected by this waiver. IDPS B2.0 production of OMPS TC AP, RDR, and SDR from JPSS-1 mission is not affected by this waiver. Relieve the production and performance of Ozone TC EDR from JPSS-1 mission from Block 2 IDPS.

Rationale: Quality Flags must be generated based on the established flag conditions, logic, and format.

Mission Effectivity: S-NPP

3.7 Data Quality Notification Requirements

SRS.01.23_294 The Ozone Total Column EDR software shall send data quality notifications to the operator according to logic specified in the JPSS Algorithm Specification, Vol IV: SRSPF for the Ozone Total Column (474-00448-04-23) <TC_EDR><Notifications>.

Waiver **474-CCR-16-2851**: Suppress IDPS B2.0 production of Ozone TC EDR using JPSS-1 OMPS data starting with JPSS L3AT/GPAT/GSAT (LG2) acceptance testing and continue the suppression indefinitely. Waive all requirements in JPSS Algorithm Specification Volume I: SRS for the Ozone TC (474-00448-01-23) for JPSS-1 mission and beyond. IDPS B2.0 production of all OMPS TC AP, RDR, SDR, and Ozone TC EDR from S-NPP mission is not affected by this waiver. IDPS B2.0 production of OMPS TC AP, RDR, and SDR from JPSS-1 mission is not affected by this waiver. Relieve the production and performance of Ozone TC EDR from JPSS-1 mission from Block 2 IDPS.

Rationale: Notifications must be generated and sent based on the established logic and conditions.

Mission Effectivity: S-NPP

3.8 Adaptation

Not applicable.

3.9 Provenance Requirements

Not applicable.

3.10 Computer Software Requirements

Not applicable.

Check the JPSS MIS Server at https://jpssmis.gsfc.nasa.gov/frontmenu_dsp.cfm to verify that this is the correct version prior to use.

3.11 Software Quality Characteristics

Not applicable.

3.12 Design and Implementation Constraints

SRS.01.23_280 The JPSS Common Ground System shall execute the EDR ozone product algorithms.

Waiver **474-CCR-16-2851**: Suppress IDPS B2.0 production of Ozone TC EDR using JPSS-1 OMPS data starting with JPSS L3AT/GPAT/GSAT (LG2) acceptance testing and continue the suppression indefinitely. Waive all requirements in JPSS Algorithm Specification Volume I: SRS for the Ozone TC (474-00448-01-23) for JPSS-1 mission and beyond. IDPS B2.0 production of all OMPS TC AP, RDR, SDR, and Ozone TC EDR from S-NPP mission is not affected by this waiver. IDPS B2.0 production of OMPS TC AP, RDR, and SDR from JPSS-1 mission is not affected by this waiver. Relieve the production and performance of Ozone TC EDR from JPSS-1 mission from Block 2 IDPS.

Rationale: The CGS must incorporate algorithm changes that are supplied by the algorithm vendor.

Mission Effectivity: S-NPP

SRS.01.23_320 The JPSS Common Ground System shall execute the ozone product algorithms.

Waiver **474-CCR-16-2851**: Suppress IDPS B2.0 production of Ozone TC EDR using JPSS-1 OMPS data starting with JPSS L3AT/GPAT/GSAT (LG2) acceptance testing and continue the suppression indefinitely. Waive all requirements in JPSS Algorithm Specification Volume I: SRS for the Ozone TC (474-00448-01-23) for JPSS-1 mission and beyond. IDPS B2.0 production of all OMPS TC AP, RDR, SDR, and Ozone TC EDR from S-NPP mission is not affected by this waiver. IDPS B2.0 production of OMPS TC AP, RDR, and SDR from JPSS-1 mission is not affected by this waiver. Relieve the production and performance of Ozone TC EDR from JPSS-1 mission from Block 2 IDPS.

Rationale: The CGS must incorporate algorithm changes that are supplied by the algorithm vendor.

Mission Effectivity: S-NPP

3.13 Personnel Related Requirements

Not applicable.

3.14 Training Requirements

Not applicable.

3.15 Logistics Related requirements

Not applicable.

Check the JPSS MIS Server at https://jpssmis.gsfc.nasa.gov/frontmenu_dsp.cfm to verify that this is the correct version prior to use.

3.16 Other Requirements

Not applicable.

3.17 Packaging Requirements

Not applicable.

3.18 Precedence and Criticality

Not applicable.

Check the JPSS MIS Server at https://jpssmis.gsfc.nasa.gov/frontmenu_dsp.cfm to verify that this is the correct version prior to use.

Appendix A. Requirements Attributes

The Requirements Attributes Table lists each requirement with CM-controlled attributes including requirement type, mission effectivity, requirement allocation(s), block start and end, method(s) for verifying each requirement, etc.

Req ID	SRS 23 - Ozone Total Column - BL 2/12/15	Level 3 Type	Product Type	Mission Effectivity	Allocated To	Block Start	Block End	Block 2.0.0 VM	Block 2.1.0 VM
SRS.01.23_295	The Ozone Total Column EDR algorithm shall calculate the ozone total column with a measurement precision of 6.0 Dobson units for columns between 50 and 250 Dobson units.	P	EDR	S-NPP	algorithm provider	2.0.0	3.0.0	Test	NA
SRS.01.23_296	The Ozone Total Column EDR algorithm shall calculate the ozone total column with a measurement precision of 7.7 Dobson units for columns between 250 and 450 Dobson units.	P	EDR	S-NPP	algorithm provider	2.0.0	3.0.0	Test	NA
SRS.01.23_297	The Ozone Total Column EDR algorithm shall calculate the ozone total column with a measurement precision of 2.8 Dobson units + 1.1% of the measured Ozone amount in a vertical column for columns ranging from 450 to 650 Dobson units.	P	EDR	S-NPP	algorithm provider	2.0.0	3.0.0	Test	NA
SRS.01.23_298	The Ozone Total Column EDR algorithm shall calculate the ozone total column with a measurement accuracy of 9.5 Dobson units for columns between 50 and 250 Dobson units.	P	EDR	S-NPP	algorithm provider	2.0.0	3.0.0	Test	NA
SRS.01.23_299	The Ozone Total Column EDR algorithm shall calculate the ozone total column with a measurement accuracy of 13 Dobson units for columns between 250 and 450 Dobson units.	P	EDR	S-NPP	algorithm provider	2.0.0	3.0.0	Test	NA
SRS.01.23_300	The Ozone Total Column EDR algorithm	P	EDR	S-NPP	algorithm	2.0.0	3.0.0	Test	NA

Req ID	SRS 23 - Ozone Total Column - BL 2/12/15	Level 3 Type	Product Type	Mission Effectivity	Allocated To	Block Start	Block End	Block 2.0.0 VM	Block 2.1.0 VM
	shall calculate the ozone total column with a measurement accuracy of 16 Dobson units for columns between 450 and 650 Dobson units.				provider				
SRS.01.23_301	The Ozone Total Column EDR algorithm shall calculate the ozone total column from 0 to 60 km.	P	EDR	S-NPP	algorithm provider	2.0.0	3.0.0	Test	NA
SRS.01.23_302	The Ozone Total Column EDR algorithm shall have a refresh of at least 90% coverage of the globe every 24 hours, averaged monthly.	P	EDR	S-NPP	algorithm provider	2.0.0	3.0.0	Test	NA
SRS.01.23_303	The Ozone Total Column EDR algorithm shall have a horizontal cell size at nadir of 50 x 50 square kilometers or smaller.	P	EDR	S-NPP	algorithm provider	2.0.0	3.0.0	Test	NA
SRS.01.23_331	The Ozone Total Column First Guess IP software shall use NCEP Surface Pressure extended forecast data for fallback processing when the relevant NCEP current forecast input is not available.	G	IP	S-NPP	CGS	2.0.0	3.0.0	Inspection	NA
SRS.01.23_332	The Ozone Total Column EDR software shall use NCEP Surface Pressure extended forecast data for fallback processing when the relevant NCEP current forecast input is not available.	G	EDR	S-NPP	CGS	2.0.0	3.0.0	Inspection	NA
SRS.01.23_323	The Ozone Total Column EDR software shall use TUG87 Surface Pressure [OMPS TC Granulation] for fallback processing when the relevant NCEP Surface Pressure current and extended forecast inputs are not available.	G	EDR	S-NPP	CGS	2.0.0	3.0.0	Inspection	NA
SRS.01.23_334	The Ozone Total Column First Guess IP	G	IP	S-NPP	CGS	2.0.0	3.0.0	Inspection	NA

Req ID	SRS 23 - Ozone Total Column - BL 2/12/15	Level 3 Type	Product Type	Mission Effectivity	Allocated To	Block Start	Block End	Block 2.0.0 VM	Block 2.1.0 VM
	software shall use TUG87 Surface Pressure [OMPS TC Granulation] for fallback processing when the relevant NCEP Surface Pressure current and extended forecast inputs are not available.								
SRS.01.23_325	The Ozone Total Column First Guess IP software shall use Combined NCEP Extended Forecast/TOMS V8 Climatology Temperature Profile [OMPS TC Granulation] for fallback processing when the relevant combined NCEP/TOMS current forecast input is not available.	G	EDR	S-NPP	CGS	2.0.0	3.0.0	Inspection	NA
SRS.01.23_327	The Ozone Total Column EDR software shall use Combined NCEP Extended Forecast/TOMS V8 Climatology Temperature Profile [OMPS TC Granulation] for fallback processing when the relevant combined NCEP/TOMS current forecast input is not available.	G	EDR	S-NPP	CGS	2.0.0	3.0.0	Inspection	NA
SRS.01.23_335	The Ozone Total Column First Guess IP software shall use Combined NCEP Extended Forecast/TOMS V8 Climatology Temperature Profile [OMPS TC Granulation] for fallback processing when the relevant combined NCEP/TOMS current forecast input is not available.	G	IP	S-NPP	CGS	2.0.0	3.0.0	Inspection	NA
SRS.01.23_329	The Ozone Total Column EDR software shall use TOMS V8 Climatology	G	EDR	S-NPP	CGS	2.0.0	3.0.0	Inspection	NA

Req ID	SRS 23 - Ozone Total Column - BL 2/12/15	Level 3 Type	Product Type	Mission Effectivity	Allocated To	Block Start	Block End	Block 2.0.0 VM	Block 2.1.0 VM
	Temperature Profile [OMPS TC granulation] data for fallback processing when the relevant combined NCEP/TOMS current and extended forecast inputs are not available.								
SRS.01.23_336	The Ozone Total Column First Guess IP software shall use TOMS V8 Climatology Temperature Profile [OMPS TC granulation] data for fallback processing when the relevant combined NCEP/TOMS current and extended forecast inputs are not available.	G	IP	S-NPP	CGS	2.0.0	3.0.0	Inspection	NA
SRS.01.23_281	The Ozone Total Column EDR software shall incorporate a computing algorithm provided for total column ozone.	Ap	EDR	S-NPP	algorithm provider	2.0.0	3.0.0	Inspection	NA
SRS.01.23_282	The Ozone Total Column EDR software shall incorporate a computing algorithm provided for reflectivity.	Ap	EDR	S-NPP	algorithm provider	2.0.0	3.0.0	Inspection	NA
SRS.01.23_283	The Ozone Total Column EDR software shall incorporate a computing algorithm provided for volcanic sulfur dioxide.	Ap	EDR	S-NPP	algorithm provider	2.0.0	3.0.0	Inspection	NA
SRS.01.23_284	The Ozone Total Column EDR software shall incorporate a computing algorithm provided for aerosol index.	Ap	EDR	S-NPP	algorithm provider	2.0.0	3.0.0	Inspection	NA
SRS.01.23_285	The Ozone Total Column EDR software shall incorporate a computing algorithm provided for normalized earth view radiances.	Ap	EDR	S-NPP	algorithm provider	2.0.0	3.0.0	Inspection	NA
SRS.01.23_286	The Ozone Total Column EDR software shall incorporate a computing algorithm provided for reporting other JPSS data products.	Ap	EDR	S-NPP	algorithm provider	2.0.0	3.0.0	Inspection	NA

Req ID	SRS 23 - Ozone Total Column - BL 2/12/15	Level 3 Type	Product Type	Mission Effectivity	Allocated To	Block Start	Block End	Block 2.0.0 VM	Block 2.1.0 VM
SRS.01.23_287	The Ozone Total Column EDR software shall incorporate a computing algorithm provided for calibration parameters reported in the product.	Ap	EDR	S-NPP	algorithm provider	2.0.0	3.0.0	Inspection	NA
SRS.01.23_288	The Ozone Total Column EDR software shall incorporate a computing algorithm provided for tropospheric ozone estimates.	Ap	EDR	S-NPP	algorithm provider	2.0.0	3.0.0	Inspection	NA
SRS.01.23_289	The Ozone Total Column EDR software shall incorporate a computing algorithm provided for cloud fraction.	Ap	EDR	S-NPP	algorithm provider	2.0.0	3.0.0	Inspection	NA
SRS.01.23_290	The Ozone Total Column EDR software shall incorporate a computing algorithm provided for quality description.	Ap	EDR	S-NPP	algorithm provider	2.0.0	3.0.0	Inspection	NA
SRS.01.23_305	The Ozone Total Column First Guess IP software shall incorporate a computing algorithm provided for total column ozone.	Ap	IP	S-NPP	algorithm provider	2.0.0	3.0.0	Inspection	NA
SRS.01.23_306	The Ozone Total Column First Guess IP software shall incorporate a computing algorithm provided for reflectivity.	Ap	IP	S-NPP	algorithm provider	2.0.0	3.0.0	Inspection	NA
SRS.01.23_307	The Ozone Total Column First Guess IP software shall incorporate a computing algorithm provided for volcanic sulfur dioxide.	Ap	IP	S-NPP	algorithm provider	2.0.0	3.0.0	Inspection	NA
SRS.01.23_308	The Ozone Total Column First Guess IP software shall incorporate a computing algorithm provided for aerosol index.	Ap	IP	S-NPP	algorithm provider	2.0.0	3.0.0	Inspection	NA
SRS.01.23_309	The Ozone Total Column First Guess IP software shall incorporate a computing algorithm provided for normalized earth view radiances.	Ap	IP	S-NPP	algorithm provider	2.0.0	3.0.0	Inspection	NA

Req ID	SRS 23 - Ozone Total Column - BL 2/12/15	Level 3 Type	Product Type	Mission Effectivity	Allocated To	Block Start	Block End	Block 2.0.0 VM	Block 2.1.0 VM
SRS.01.23_310	The Ozone Total Column First Guess IP software shall incorporate a computing algorithm provided for reporting other JPSS data products.	Ap	IP	S-NPP	algorithm provider	2.0.0	3.0.0	Inspection	NA
SRS.01.23_311	The Ozone Total Column First Guess IP software shall incorporate a computing algorithm provided for calibration parameters reported in the product.	Ap	IP	S-NPP	algorithm provider	2.0.0	3.0.0	Inspection	NA
SRS.01.23_312	The Ozone Total Column First Guess IP software shall incorporate a computing algorithm provided for tropospheric ozone estimates.	Ap	IP	S-NPP	algorithm provider	2.0.0	3.0.0	Inspection	NA
SRS.01.23_313	The Ozone Total Column First Guess IP software shall incorporate a computing algorithm provided for cloud fraction.	Ap	IP	S-NPP	algorithm provider	2.0.0	3.0.0	Inspection	NA
SRS.01.23_314	The Ozone Total Column First Guess IP software shall incorporate a computing algorithm provided for quality description.	Ap	IP	S-NPP	algorithm provider	2.0.0	3.0.0	Inspection	NA
SRS.01.23_291	The Ozone Total Column EDR software shall set <FillField> to indicated <FillValue> for <FillCondition> specified in the JPSS Algorithm Specification, Vol IV: SRSPF for the Ozone Total Column (474-00448-04-23) <TC_EDR> <fill>.	E	EDR	S-NPP	CGS	2.0.0	3.0.0	Inspection	NA
SRS.01.23_316	The Ozone Total Column First Guess IP software shall set <FillField> to indicated <FillValue> for <FillCondition> specified in the JPSS Algorithm Specification, Vol IV: SRSPF for the Ozone Total Column (474-00448-04-23)	E	IP	S-NPP	CGS	2.0.0	3.0.0	Inspection	NA

Req ID	SRS 23 - Ozone Total Column - BL 2/12/15	Level 3 Type	Product Type	Mission Effectivity	Allocated To	Block Start	Block End	Block 2.0.0 VM	Block 2.1.0 VM
	<TC_First_Guess_IP> <fill>.								
SRS.01.23_333	The Ozone Total Column EDR software shall incorporate inputs as specified in Table 3-1.	I	EDR	S-NPP	CGS	2.0.0	3.0.0	Inspection	NA
SRS.01.23_337	The Ozone Total Column First Guess IP software shall incorporate inputs as specified in Table 3-1.	I	IP	S-NPP	CGS	2.0.0	3.0.0	Inspection	NA
SRS.01.23_339	The Ozone TC EDR software shall ingest tables and coefficients formatted in accordance with Section 7 of the JPSS Algorithm Specification Vol II: Data Dictionary for Ozone TC (474-00448-02-23).	Ft	EDR	S-NPP	CGS	2.0.0	3.0.0	Inspection	NA
SRS.01.23_292	The Ozone Total Column EDR software shall generate the ozone total column EDR product in conformance with the XML format file in Attachment A.1 of the JPSS Algorithm Specification, Vol II: Data Dictionary for the Ozone Total Column (474-00448-02-23).	F	EDR	S-NPP	CGS	2.0.0	3.0.0	Inspection	NA
SRS.01.23_317	The Ozone Total Column First Guess IP software shall generate the ozone total column First Guess IP product in conformance with the XML format file in Attachment A.2 of the JPSS Algorithm Specification, Vol II: Data Dictionary for the Ozone Total Column (474-00448-02-23).	F	IP	S-NPP	CGS	2.0.0	3.0.0	Inspection	NA
SRS.01.23_293	The Ozone Total Column EDR software shall use the geolocation for the OMPS Total Column Science SDR.	Fg	EDR	S-NPP	CGS	2.0.0	3.0.0	Inspection	NA
SRS.01.23_318	The Ozone Total Column First Guess IP	Fg	IP	S-NPP	CGS	2.0.0	3.0.0	Inspection	NA

Req ID	SRS 23 - Ozone Total Column - BL 2/12/15	Level 3 Type	Product Type	Mission Effectivity	Allocated To	Block Start	Block End	Block 2.0.0 VM	Block 2.1.0 VM
	software shall use the geolocation for the OMPS Total Column Science SDR.								
SRS.01.23_304	The Ozone Total Column EDR software shall report for each <FlagScope> quality flags using <FlagLogic> as specified in the JPSS Algorithm Specification, Vol IV: SRSPF for the Ozone Total Column (474-00448-04-23) <TC_EDR><QF>.	Q	EDR	S-NPP	CGS	2.0.0	3.0.0	Inspection	NA
SRS.01.23_319	The Ozone Total Column First Guess IP software shall report for each <FlagScope> quality flags using <FlagLogic> as specified in the JPSS Algorithm Specification, Vol IV: SRSPF for the Ozone Total Column (474-00448-04-23) <TC_First Guess_IP><QF>.	Q	IP	S-NPP	CGS	2.0.0	3.0.0	Inspection	NA
SRS.01.23_294	The Ozone Total Column EDR software shall send data quality notifications to the operator according to logic specified in the JPSS Algorithm Specification, Vol IV: SRSPF for the Ozone Total Column (474-00448-04-23) <TC_EDR><Notifications>.	N	EDR	S-NPP	CGS	2.0.0	3.0.0	Inspection	NA
SRS.01.23_280	The JPSS Common Ground System shall execute the EDR ozone product algorithms.	Ai	EDR	S-NPP	CGS	2.0.0	3.0.0	Inspection	NA
SRS.01.23_320	The JPSS Common Ground System shall execute the ozone product algorithms.	Ai	IP	S-NPP	CGS	2.0.0	3.0.0	Inspection	NA